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BEFORE THE
SURFACE TRANSPORTATION BOARD

WESTERN FUELS ASSOCIATION, INC. and BASIN ELECTRIC POWER COOPERATIVE, INC. Complainants, v. BNSF RAILWAY COMPANY Defendant.	Docket No. 42088

REBUTTAL EVIDENCE OF COMPLAINANTS WESTERN FUELS ASSOCIATION, INC. AND BASIN ELECTRIC POWER COOPERATIVE, INC.

NARRATIVE

VOLUME 1 OF 2

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WESTERN FUELS ASSOCIATION, INC.
And BASIN ELECTRIC POWER
COOPERATIVE, INC.

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ACRONYMS

The following acronyms are used:

AAR	Association of American Railroads
AEI	automatic equipment identification scanner
AEO 2005	Annual Energy Outlook, 2005 edition, published by the EIA
AREMA	American Railway Engineering and Maintenance-of-Way Association
ATF	across-the-fence
Basin/Basin Electric	Basin Electric Power Cooperative, Inc.
BN	Burlington Northern Railroad Company
BNSF	BNSF Railway Company, f/k/a The Burlington Northern and Santa Fe Railway Company
CA	constructive allowance
CMP	Constrained Market Pricing
cmp	corrugated metal pipe
CNW	Chicago and North Western Railway Company
CSX	CSX Transportation, Inc.
CTC	centralized traffic control system
CWR	continuous welded rail
CY	cubic yards
DCF	discounted cash flow
DED	dragging equipment detector
DP	distributed power (type of locomotive configuration on a train)
DRGW	Denver & Rio Grande Western Railway Company
EIA	Energy Information Administration, U.S. Department of Energy
EOTD	end-of-train device
FADB	BNSF's Fixed Asset Data Base
FEC	Florida East Coast Railway Company
FED	failed equipment detector
FRA	Federal Railway Administration
G&A	general and administrative
GAAP	General Accepted Accounting Principle
GTM	gross ton-miles
GWR	gross weight on rail
IC	Illinois Central Railroad Company
ICC	Interstate Commerce Commission
IDC	interest during construction
IT	information technology
JT	jurisdictional threshold
KCS	The Kansas City Southern Railway Company

L&D	loss and damage
LF	linear feet
LRR	Laramie River Railroad
LRS	Laramie River Generating Station
LUM	locomotive unit-mile
Means	R.S. Means (engineering unit-cost reference guide)
MGA	Monongahela Railway
MGT	million gross tons
MOW	maintenance-of-way
MP	milepost
MRL	Montana Rail Link
MSP	Modified Straight-Mileage Prorate
NS	Norfolk Southern Railway Company
O/D	origin/destination
PRB	Powder River Basin of Wyoming
PRM	The Board's percentage reduction method
QRS	Quality Rail Services, LLC
R-1	Annual Report Form R-1
RAM	WFA/Basin's Revenue Allocation Methodology
RCAF-A	rail cost adjustment factor, adjusted for changes in productivity
RCAF-U	rail cost adjustment factor, unadjusted for changes in productivity
RCB	reinforced concrete box culvert
ROI	return on investment
ROW	right-of-way
R/VC	revenue-to-variable cost
RTC Model	Rail Traffic Controller simulation model
SAC	stand-alone cost
SARR	stand-alone railroad
SEM	switch engine minutes
SP	Southern Pacific Transportation Company
STB	Surface Transportation Board
T&E	train and engine crew
T&O	traffic and operating
UP	Union Pacific Railroad Company
URCS	Uniform Railroad Costing System
USGS	United States Geological Survey
VC	variable cost
WC	Wisconsin Central Railroad Company
WCS	Wisconsin Central System
WFA	Western Fuels Association, Inc.
WRPI	Western Railroad Properties, Incorporated
4WD	Four-wheel drive

CASE GLOSSARY

The following short form case citations are used:

AEP Texas	AEP Texas North Co. v. Burlington Northern and Santa Fe Ry., STB STB Docket No. 41191 (Sub No. 1) (filed Aug. 11, 2003)
AEPCO	Arizona Electric Power Coop., Inc. v. Burlington Northern and Santa Fe Ry., STB Docket No. 42058 (STB served March 15, 2005)
APS I	Arizona Public Service Co. v. Atchison, Topeka and Santa Fe Ry., 2 S.T.B. 367 (1997)
APS II	Arizona Public Service Co. v. Atchison, Topeka and Santa Fe Ry., 3 S.T.B. 70 (1998)
APL	Arkansas Power & Light Co. v. Burlington Northern R.R., 3 I.C.C.2d 757 (1987)
CPL	Carolina Power & Light Co. v. Norfolk Southern Ry., STB Docket No. 42072 (STB served Dec. 23, 2003)
Coal Rate Guidelines or Guidelines	Coal Rate Guidelines, Nationwide, 1 I.C.C.2d 520 (1985), aff'd sub nom. Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3rd Cir. 1987)
Coal Trading	Coal Trading Corp. v. The Baltimore & Ohio R.R., 6 I.C.C.2d 361 (1990)
Duke/CSX	Duke Energy Corp. v. CSX Transportation, Inc., STB Docket No. 42070 (STB served Feb. 4, 2004)
Duke/NS I	Duke Energy Corp. v. Norfolk Southern Ry., STB Docket No. 42069 (STB served Nov. 6, 2003)
Duke/NS II	Duke Energy Corp. v. Norfolk Southern Ry., STB Docket Nos. 42069, 42070 & 42072 (STB served Oct. 20, 2004)
FMC	FMC Wyoming Corp. v. Union Pacific R.R., STB Docket No. 42022 (STB served May 12, 2000)

McCarty Farms	McCarty Farms, Inc. v. Burlington Northern, Inc., 2 S.T.B. 460 (1997)
Nevada Power I	Bituminous Coal -- Hiawatha, Utah to Moapa, Nevada, 6 I.C.C.2d 1 (1989)
Nevada Power II	Bituminous Coal -- Hiawatha, Utah to Moapa, Nevada, 10 I.C.C.2d 259 (1994)
OPPD	Omaha Public Power District v. Burlington Northern R.R., 3 I.C.C.2d 123 (1986) aff'd on appeal 3 I.C.C. 2d 853 (1987)
Otter Tail	Otter Tail Power Co. v. Burlington Northern and Santa Fe Ry., STB Docket No. 42071 (filed Jan. 2, 2002)
PPL	PPL Montana, LLC v. Burlington Northern and Santa Fe Ry., STB Docket No. 42054 (STB served Aug. 20, 2002)
San Antonio	San Antonio, Texas v. Burlington Northern R.R., 1 I.C.C.2d 561 (1986)
TMPA I	Texas Municipal Power Agency v. Burlington Northern and Santa Fe Ry., STB Docket No. 42056 (STB served March 24, 2003)
TMPA II	Texas Municipal Power Agency v. Burlington Northern and Santa Fe Ry., STB Docket No. 42056 (STB served Sept. 27, 2004)
WTU	West Texas Utilities Co. v. Burlington Northern R.R., 1 S.T.B. 638 (1996), aff'd sub nom. Burlington Northern R.R. v. S.T.B. 114 F.3d 206 (D.C. Cir. 1997)
WPL I	Wisconsin Power & Light Co. v. Union Pacific R.R., STB Docket No. 42051 (STB served Sept. 13, 2001)
Xcel I	Public Service Company of Colorado d/b/a Xcel Energy v. Burlington Northern and Santa Fe Ry., STB Docket No. 42057 (STB served June 8, 2004)
Xcel II	Public Service Company of Colorado d/b/a Xcel Energy v. Burlington Northern and Santa Fe Ry., STB Docket No. 42057 (STB served Jan. 19, 2005)

I Counsel's Argument

BEFORE THE
SURFACE TRANSPORTATION BOARD

WESTERN FUELS ASSOCIATION, INC. and BASIN ELECTRIC POWER COOPERATIVE, INC.	)	
Complainants,	)	Docket No. 42088
v.	)	
BNSF RAILWAY COMPANY	)	
Defendant.	)	

I. COUNSEL'S REBUTTAL ARGUMENT AND SUMMARY OF EVIDENCE

Complainants Western Fuels Association, Inc. ("Western Fuels") and Basin Electric Power Cooperative, Inc. ("Basin Electric") (collectively "WFA/Basin") submit the following rebuttal evidence. This rebuttal evidence responds to the reply evidence submitted by the Defendant BNSF Railway Company ("BNSF") on July 20, 2005.

A. PREFACE

On Reply, BNSF concedes that it exerts market dominance over WFA/Basin's coal deliveries from the Power River Basin ("PRB") to the Laramie River

Station ("LRS").[1] BNSF also concedes that it has imposed massive rate increases on the LRS traffic.[2] BNSF argues, however, that its pricing actions are fully justified and that WFA/Basin are entitled to no relief from the Board. Indeed, BNSF argues that WFA/Basin are "gaming" the system by asking for rate relief.

BNSF's defenses are not surprising ones. In recent judicial review proceedings in another case, Board counsel observed that BNSF "objects to any restraint on its pricing" and "any application of the [Stand-Alone Cost] SAC test that results in relief to captive shippers."[3] This case is no different, except for the utter outrageousness of BNSF's contentions.

WFA/Basin paid 4Q04 LRS tariff rates that averaged $6.60 per ton – more than double the expired LRS contract rates. WFA/Basin present an extensive and detailed case demonstrating the maximum SAC rate for their 4Q04 deliveries equals $3.37 per ton. WFA/Basin's SAC calculations produce rates that average 20.0 mills per ton-mile. These rates are in line with those the Board has prescribed in recent PRB coal rate cases.[4] And

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[1] See BNSF Reply Narrative ("Narr.") at II-34 ("BNSF does not contest WFA/Basin's evidence relating to [BNSF's market dominance]").

[2] See BNSF Op. Narr. at II-21 (conceding that LRS rate increases are "significant").

[3] Brief for Respondent STB, BNSF Ry. v. STB, No. 05-1030, (D.C. Cir. filed July 21, 2005) at 36 ("Board's Xcel Brief").

[4] See Wisconsin Power & Light Co. v. Union Pacific R.R., STB Docket No. 42051 (STB served Sept. 13, 2001) ("WPL I") (prescribing 9.8 mill maximum rate); Texas Municipal Power Agency v. Burlington Northern and Santa Fe Ry., STB Docket No.

BNSF earns handsome returns on these rates, which carry average R/VC ratios in excess of 244%.

BNSF, on the other hand, claims that the average SAC rate on the LRS traffic equals $10.24 at 4Q04 levels. This rate approximates 59.8 mills per ton mile – i.e., 3 times higher than the rates the Board has prescribed in prior cases, with resulting R/VC ratios in excess of 742%.

As discussed in detail in WFA/Basin's rebuttal evidence, BNSF develops SAC rates at off-the-charts levels by employing a number of litigation tactics: BNSF ignores governing SAC precedent, BNSF cooks up new theories that cut Stand-Alone Railroad ("SARR") revenues down to absurdly low levels, BNSF inflates SARR costs to astronomically high levels, etc.

BNSF is desperately pushing the edge of the envelope in this case because under any principled application of the Coal Rate Guidelines,[5] WFA/Basin is entitled to the relief it seeks. WFA/Basin's SARR – the Laramie River Railroad ("LRR") –

42056 (STB served March 24, 2003) ("TMPA I") (prescribing 13.1 mill maximum rates for movements in BNSF-supplied cars); Public Service Company of Colorado d/b/a Xcel Energy v. Burlington Northern and Santa Fe Ry., STB Docket No. 42057 (STB served June 8, 2004) ("Xcel I") (prescribing 21.5 mill maximum rates); WFA/Basin Rebuttal Exhibit III-H-1.

[5] Coal Rate Guidelines, Nationwide, 1 I.C.C.2d 520 (1985), aff'd sub nom. Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3rd Cir. 1987). ("Coal Rate Guidelines" or "Guidelines").

traverses the densest portion of the BNSF railroad. SAC results are density-driven[6] – and no previous SARR has had better traffic densities across their entire SARR system than the LRR.

BNSF's gaming contentions further reflect its desperate position. Western Fuels and Basin Electric are not-for-profit cooperatives. They appear in this case on behalf of the rural electric and small municipal customers served by LRS. WFA/Basin have no financial incentive to "game" the STB's ratemaking process. BNSF's gaming claims also ignore the reality of its pricing actions. These actions have generated outrage throughout the west.[7]

Western Fuels and Basin Electric look to the Board as their last line of defense against BNSF's monopoly pricing abuses. Western Fuels and Basin Electric are confident that any reasonable application of the Guidelines will result in the Board's prescribing the rate relief they jointly request.

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[6] See Guidelines at 553.

[7] Statements of grave concern over BNSF's pricing actions have been submitted by the over 200 cooperative, municipal and public power systems the LRS partners serve; by the American Public Power Association; by the National Rural Electric Cooperative Association; by thirteen United States Senators; by nine members of the United States House of Representatives; by three state Governors; and by two state Attorneys General. See WFA/Basin Op. Part IV-B. These statements are included in Exhibits IV-B-1 through IV-B-10 of WFA/Basin's opening evidence.

B. BNSF CONCEDES THAT IT EXERTS MARKET DOMINANCE OVER THE LRS TRAFFIC

The STB has jurisdiction to adjudicate a maximum rate case only if the defendant carrier exerts "market dominance" over the issue traffic. 49 U.S.C. §§10701(d), 10707(b), (c). To determine whether market dominance exists, the STB evaluates whether the challenged rates exceed 180% of the defendant carrier's variable service costs (the STB's quantitative review) and whether the defendant carrier faces any effective transportation competition for moving the issue traffic (the STB's qualitative review).

On Opening, WFA/Basin demonstrated that BNSF exerts "qualitative" market dominance over PRB-to-LRS transportation. BNSF's monopoly over this transportation service arises because BNSF is the sole rail carrier serving the LRS plant and because WFA/Basin have only one practical alternative – the BNSF – to haul their 8 million+ ton annual coal deliveries from the PRB to LRS. On Reply, BNSF concedes that it possesses qualitative market dominance over the LRS traffic.[8]

BNSF also concedes on Reply that it possesses quantitative market dominance over the LRS traffic. BNSF calculates R/VC ratios for the LRS traffic in the 321% to 361% range – ratios that substantially exceed the 180% jurisdictional threshold.[9]

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[8] See BNSF Reply Narr. at II-34.

[9] Id. at II-33.

However, BNSF's R/VC ratios are understated because its variable cost calculations are overstated.

1. The Board Should Adopt WFA/Basin's Variable Cost Evidence

WFA/Basin and BNSF calculate variable costs for all BNSF movements from the Powder River Basin ("PRB") to LRS in the fourth quarter of 2004 ("4Q04"). Rebuttal Table I-1 below compares WFA/Basin's Rebuttal variable cost calculations to BNSF's Reply variable cost calculations:

Rebuttal Table I-1
Comparison of WFA/Basin Rebuttal and BNSF Reply Variable Cost Calculations For BNSF Movements to LRS (4Q04)

Origin (1)	**BNSF Variable Cost \$/ton** (2)	**WFA/Basin Variable Cost \$/ton** (3)	**Difference (Col. 3-Col. 2) \$/ton** (4)
Dry Fork	$2.04	$1.45	$0.59
Eagle Butte	2.10	1.50	0.60
Cordero	1.83	1.31	0.52
Caballo Rojo	1.85	1.31	0.54
Jacobs Ranch	1.73	1.24	0.49

As shown in Rebuttal Table I-1, the parties' variable costs differ by $0.49 to $0.60 per ton, depending on the LRS traffic origin. WFA/Basin demonstrate in detail in their prior filings,[10] and in Part II-A below, why their variable cost evidence is superior to

[10] See WFA/Basin Op. Narr. Part II-A, WFA/Basin Reply Narr. Parts I-A and II-A.

BNSF's variable cost evidence. The reasons the Board should accept WFA/Basin's variable cost evidence, and reject BNSF's variable cost evidence, include the following:

- Yard Switching. BNSF deliberately attempts to inflate its variable costs by including { } per ton for "yard switching" costs.[11] Yard switching constitutes approximately 30% of the difference between the parties' variable cost calculations. BNSF's yard switching calculations are remarkable ones because, as BNSF concedes, the LRS trains do not go through any BNSF yards, and BNSF performs no yard switching on LRS trains.[12] WFA/Basin properly exclude "yard switching" costs in their variable cost computations.[13]

- Locomotive Fuel. WFA/Basin calculate BNSF's locomotive fuel costs on a system-average basis. BNSF calculates locomotive fuel consumption, and locomotive fuel prices, on the basis of hopelessly flawed special studies.[14]

In its opening evidence, BNSF presented the results of an "event recorder" fuel study to calculate movement-specific fuel consumption rates the results of LRS trains. WFA/Basin explained in detail in their Reply filing why the Board must reject

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[11] See BNSF Reply electronic workpaper "BNSF MOBA REPLY PRG.123," tab "D," line 3.

[12] See BNSF Op. Narr. at II-2 ("[a]nother distinguishing feature of the Laramie River move is that the Laramie River trains do not pass through a major BNSF yard").

[13] See WFA/Basin Reply Narr. at II-A-3 to 5; WFA/Basin Rebuttal Narr. at II-A-8 to 11.

[14] See WFA/Basin Rebuttal Narr. at II-A-28.

BNSF's special study: that study was done in secret; was sprung on WFA/Basin shortly before opening evidence was filed; contains only unsupported "Black Box" results; and is wracked with numerous other errors (e.g., BNSF collected no event recorder data from the principal type of locomotive used in LRS service – SD70MAC's).[15]

BNSF's secret event recorder fuel consumption study is remarkably different than the even recorder studies the Board has accepted in prior cases where the parties have jointly agreed on the fuel study parameters; the defendant carrier has provided the complainant shipper with the study results, as well as the underlying raw event recorder data and the computer program used to manipulate that data; and the studies have incorporated reasonable data collection procedures (e.g., collecting fuel consumption data from the principal locomotive types used in the complainant shipper's service.)[16]

On Reply, BNSF attempts to verify its flawed event recorder fuel consumption study results with a separate "fuel meter ticket" special study.[17] However, as WFA/Basin demonstrate in Rebuttal Exhibit II-A-2, BNSF's fuel ticket study is just as flawed as its event recorder fuel study. The fuel tickets provided by the contractor that fuels locomotives on the LRS trains at LRS contain incomplete and

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[15] See WFA/Basin Reply Exhibit II-A-1 and Rebuttal Exhibit II-A-2.

[16] See WFA/Basin Reply Exhibit III-A-1, pp. 1-12.

[17] See BNSF Reply Narr. at II-18 to 19.

inconsistent data, and there is no evidence that the fuel consumption for repetitive train cycles was on an apples-to-apples basis. See WFA/Basin Rebuttal Exhibit II-A-2, pp. 2-6.

Not surprisingly, BNSF's special studies show fuel consumption results significantly above both BNSF system-average fuel consumption, and above the fuel consumption results determined using jointly-supervised (and verified) special fuel consumption studies.

BNSF relies upon yet another special study to calculate fuel prices.[18] This study inflates BNSF's fuel costs by manipulating the price BNSF pays for fuel. In particular, BNSF uses internal data on the delivered cost of diesel fuel at Guernsey, LRS and other specific locations that double-counts for the costs of "DTL" fueling (fueling by tanker truck), and that improperly fails to take into account the cost-lowering benefits of BNSF's fuel hedging program. See WFA/Basin Rebuttal Narr. at III-D-13 to 21.

WFA/Basin's system-average fuel costs remain the best fuel cost evidence of record. See WPL I at 55 (when faced with a choice between system-average fuel cost and flawed special study fuel costs, the STB utilizes system-average fuel costs).[19]

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[18] Id.

[19] Accord TMPA I at 68 (rejecting BNSF special study results where the underlying computer programs and data were not "made available [for STB] review and manipulation").

• Road Property Costs. WFA/Basin calculate road property costs using special study procedures the Board, and its predecessor the Interstate Commerce Commission ("ICC"), have approved in every PRB coal case involving BNSF since the ICC's landmark San Antonio decision in 1986.[20] BNSF itself relied on these procedures in presenting road property cost evidence in WTU.[21]

In this case, BNSF relies on system-average road property costs and presents the same flawed arguments challenging WFA/Basin's road property special study cost procedures that the Board has repeatedly rejected in recent decisions.[22] In Ex Parte No 347 (Sub-No. 3),[23] the Board ruled it would adhere to "settled precedent" unless a party presented new evidence or argument. BNSF presents no new evidence or argument on this issue, and WFA/Basin apply well-settled road property costing study procedures that have been used and approved for over twenty years.

• Locomotive Capital Costs. WFA/Basin and BNSF calculate movement-specific locomotive capital costs. The parties reach significantly different

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[20] See WFA/Basin Rebuttal Exhibit III-A-1, p. 6.

[21] West Texas Utilities Co. v. Burlington Northern R.R., 1 S.T.B. 638 (1996), aff'd sub nom. Burlington Northern R.R. v. S.T.B. 114 F.3d 206 (D.C. Cir. 1997).

[22] See TMPA 1 at 56-57; Xcel I at 136.

[23] General Procedures for Presenting Evidence in Stand-Alone Cost Rate Cases, Ex Parte No. 347 (Sub-No. 3), (STB served March 12, 2001) at 6 ("General Procedures").

results due to their differing calculations of spare margin factors and locomotive lease rates.

WFA/Basin calculate a spare margin of { }. WFA/Basin's calculations comport with over 25 years of ICC and STB precedent in PRB coal rate cases, setting spare margins, for variable cost purposes, in the 5% to 10% range.[24] BNSF calculates a spare margin of { }. This spare margin falls within the spare margin ranges BNSF has asked the ICC and the Board to prescribe over the last 25 years, and as to which the ICC/Board have consistently rejected during most of this time period.[25]

BNSF predicates its spare margin factor on the results of a flawed special study. Among the many study errors are BNSF's inclusion of locomotive idle time in its spare margin.[26] BNSF relies upon the Board's Xcel I decision to support inclusion of idle time. In Xcel I, the Board overturned 25 years of ICC/Board precedent by permitting a carrier to include locomotive idle time in its spare margin calculations.[27] The Board's Xcel I decision erred here because, by definition, spare margin does not include locomotive idle time. See WTU at 690-91 ("increasing the spare margin for idle time is inappropriate" because "[i]f locomotives are idle, they are ready for service and no spares

[24] See WFA/Basin Rebuttal Narr. at II-A-34.

[25] Id. at II-A-36.

[26] Id.

[27] See Xcel I at 129.

are needed"). WFA/Basin respectfully ask the Board to reconsider the Xcel I decision for the reasons set forth in their filings in this case.[28]

BNSF further inflates its locomotive capital cost computations by using constructed life-of-lease average payment rates rather that the actual lease rates that apply during the period being costed.[29] BNSF's approach has been consistently rejected by the Board.[30]

WFA/Basin's locomotive capital cost evidence best captures the locomotive capital costs BNSF incurs in providing LRS service.

- Locomotive Maintenance Costs. Most locomotives in LRS service are SD70MAC's. BNSF provided sufficient information in discovery to permit WFA/Basin to calculate SD70MAC-specific maintenance costs. This information included SD70MAC full service leases (which include lessor-provided maintenance). In response to prior Board decisions,[31] WFA/Basin adjust only those URCS accounts corresponding to accounts covered by the locomotive leases. Repair costs not covered by the leases (e.g., non-routine maintenance costs) are costed on a system-average basis.

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[28] See WFA/Basin Op. Narr. at I-9 and at II-A-25 to 27; WFA/Basin Reply Narr. at I-3 to 4, at II-A-15 to 16 and Reply Exhibit II-A-2; WFA/Basin Rebuttal Narr. at II-A-34 to 38 and Rebuttal Exhibit II-A-4.

[29] See WFA/Basin Reply Narr. at II-A-16.

[30] See, e.g., WPL I at 57-58, Xcel I at 142.

[31] See Xcel I at 138; TMPA I at 58.

BNSF criticizes WFA/Basin's special study. WFA/Basin's rebuttal evidence demonstrates that most of BNSF's criticisms are without merit.[32] However, WFA/Basin does adjust its study results to include certain omitted labor costs.[33] WFA/Basin's locomotive maintenance costs – which include pertinent SD70MAC locomotive-specific maintenance costs – are superior to BNSF's system-average calculations.[34]

- Maintenance-of-Way Costs. The LRS trains traverse the BNSF/Union Pacific Railroad Company ("UP") PRB Joint Line. BNSF records its actual maintenance-of-way ("MOW") expenditures for the Joint Line as joint-facility MOW costs. BNSF provided this expenditure data in discovery, and WFA/Basin used it to develop line-specific MOW joint facility costs. WFA/Basin costs maintenance for the remainder of the LRS route on a system-average basis.[35]

BNSF asks the Board to reject WFA/Basin's special study results because, BNSF opines, WFA/Basin did not use the correct URCS "variability factor." WFA/Basin did use the correct variability factor, which is the 63% variability factor for joint facility

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[32] See WFA/Basin Rebuttal Narr. at II-A-29 and Rebuttal Exhibit II-A-3.

[33] Id.

[34] On Reply, BNSF takes a few misguided pot-shots at WFA/Basin's special study calculating the { } spare margin and feebly attempts to defend its use of constructed average lease rates. See WFA/Basin Rebuttal Narr. at II-A-34 to 38 and Rebuttal Exhibit II-A-3.

[35] See WFA/Basin Rebuttal Narrative at II-A-17 to 21.

MOW costs.[36] WFA/Basin's MOW costs – which include BNSF's actual line-specific costs of maintaining the Joint Line – are superior to BNSF's system-average costs.[37]

- Other Costs. When the parties disagree on other cost items, the Board should accept WFA/Basin's evidence because, unlike BNSF's, it conforms to governing Board costing precedents.

2. The R/VC Ratios on the LRS Traffic Exceed 445%

WFA/Basin's Rebuttal variable cost evidence results in the R/VC ratios for the LRS traffic shown in Rebuttal Table I-2:

Rebuttal Table I-2
Computation of R/VC Ratios
Using WFA/Basin,
PRB to LRS (4Q04)

Origin	Rate with Surcharge	Variable Cost	R/VC
Dry Fork	$6.71	1.45	463%
Eagle Butte	6.72	1.50	448
Cordero	6.48	1.31	495
Caballo Rojo	6.53	1.31	498
Jacobs Ranch	6.25	1.24	504

The R/VC ratios calculated using WFA/Basin's correct variable cost evidence demonstrate that BNSF's tariff rates produce R/VC ratios in the 448% to 504% range.

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[36] See WFA/Rebuttal Narr. at II-A-17 to 21.

[37] See WFA/Basin Rebuttal Exhibit II-A-1, p. 15 at Attachment 1.

C. BNSF'S TARIFF RATES ARE UNREASONABLE BECAUSE SARR REVENUES EXCEED SARR COSTS

WFA/Basin invoke the Board's SAC test to demonstrate the unlawfulness of BNSF's tariff prices. This test is set forth in the governing CMP standards promulgated in Coal Rate Guidelines: "[T]he purpose of a SAC analysis is to determine the least cost at which an efficient competitor could provide the service."[38] Id. (emphasis on original). Under the Guidelines, a shipper is entitled to relief if SARR revenues exceed SARR costs on market dominant traffic.[39]

WFA/Basin's SARR is the LRR. WFA/Basin's evidence demonstrates that BNSF's tariff rates are unreasonable because LRR SAC revenues substantially exceed LRR SAC costs. On Rebuttal, WFA/Basin calculate the difference between LRR revenues and LRR costs as equaling $1.52 billion on a present value basis.

In its reply evidence, BNSF asserts that its tariff rates are reasonable because LRR SAC revenues do not exceed LRR SAC costs over the twenty-year DCF period. BNSF calculates the shortfall (i.e., SARR costs exceeding SARR revenues) as falling between $678 million and $926 million during the twenty-year DCF period.[40]

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[38] Id. at 542 (emphasis in original).

[39] Id. at 542-43; Xcel I at 36.

[40] BNSF presents four different DCF runs on Reply, each of which is based on different revenue and volume assumptions. See Part III-H-3-e below. For each run, BNSF's calculated SAC costs exceed BNSF's calculated SARR revenues.

WFA/Basin's SAC evidence is demonstrably superior to BNSF's SAC evidence. See Part III below. Some of the reasons why the Board should accept WFA/Basin's SAC evidence, and reject BNSF's SAC evidence, are summarized below.

1. The LRR is Conservatively Configured

The LRR is designed to provide origin-to-destination service for the LRS traffic. The LRR also serves 36 other utility customers – all of whom are current, or future, BNSF customers. LRR-originated coal is delivered to 76 utility plant locations. BNSF repeatedly claims that WFA/Basin's traffic group "games" the STB maximum rate process. BNSF's gaming assertions are absurd because, as the record clearly shows:

- The LRR is very conservatively configured. Like most Board-approved SARRs the LRR provides origin-to-destination service for the issue traffic. Significantly, the LRR contains no re-routed traffic and no UP traffic.[41]

- The LRR provides service for the LRS traffic, as well as service for other utilities that currently move coal traffic over the BNSF PRB-to-LRS lines. The Board has routinely accepted inclusion of such "cross-over traffic" in a SARR's traffic group. Inclusion of cross-over traffic permits the LRR "to take into account the economies of scale, scope and density that the defendant carrier enjoys over the routes replicated."[42]

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[41] See WFA/Basin Rebuttal Narr. at III-A-1 to 4.

[42] Xcel I at 13-14.

- The LRR cross-over traffic exits the LRR at interchange points with the residual BNSF so that LRR/residual BNSF service follows the identical routings of current BNSF service. This approach fully conforms to Board precedent.[43] BNSF repeatedly opines that WFA/Basin's cross-over traffic movements are too short. However, the length of the cross-over movements is not dictated by any manipulation by WFA/Basin. Instead, the route lengths are dictated by geography.[44]

- BNSF's biggest gaming complaint involves the interplay between cross-over movement length and cross-over revenue allocations. BNSF complains that WFA/Basin allocates too much revenue to the LRR for its cross-over movements. In fact, WFA/Basin's cross-over revenue divisions { } are in line with real-world market divisions.[45] And, under WFA/Basin's proposed Reasonable Allocation Method ("RAM") rate relief standard, any asserted "over-profit" on cross-over movements plays no part in setting the maximum rates on the LRS traffic.[46]

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[43] See WFA/Basin Op. Narr. at III-A-5.

[44] See WFA/Basin Rebuttal Narr. at III-A-9 to 11.

[45] See WFA/Basin Op. Narr. at III-A-17 to 18; WFA/Basin Op. Exhibits III-A-3 and III-A-4.

[46] See WFA/Basin Rebuttal Narr. at III-H-15.

2. The LRR Contains No Cross-Subsidy Traffic

BNSF argues that the LRR traffic that originates at mines north of Donkey Creek, WY and exits the LRR system at Donkey Creek or Campbell WY is "cross-subsidizing" traffic that moves south of Donkey Creek. The only evidence BNSF presents in support of this claim is its contention that the LRR SARR revenues for the north of Donkey Creek traffic exceed the LRR SAC costs BNSF attributes to this segment.[47]

BNSF's cross-subsidy contentions are wrong. In PPL,[48] the Board property rejected BNSF's claims that a SARR segment cross-subsidy exists where SARR segment revenues exceed SARR segment costs. Instead, the Board held that a cross-subsidy exists where a SARR traffic segment is not covering its attributable costs. As stated by the Board in PPL:

> In examining whether the hypothesized [PPL SARR] incorporates a proscribed cross-subsidy, the appropriate inquiry is not, as BNSF suggests, whether a particular subset of traffic is generating revenues in excess of the SAC associated with serving that subset of traffic, but whether there is a readily identifiable subset of traffic that would not cover the collective attributable costs associated with serving the traffic.

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[47] See BNSF Reply Narr. at III-A.64 to 66.

[48] PPL Montana, LLC v. Burlington Northern and Santa Fe Ry., STB Docket No. 42054 (STB served Aug. 20, 2002).

Id. at 9-10 (footnote omitted).

BNSF points to no LRR traffic segment for which (using WFA/Basin's SAC calculations), LRR revenues do not exceed LRR costs. None exist. Accordingly, the LRR contains no cross-subsidy traffic.

3. WFA/Basin Correctly Calculate and Forecast LRR Traffic Volumes

WFA/Basin calculate that the LRR will transport 4.30 billion tons over the twenty-year DCF period. BNSF presents two LRR volume projections – a "Full SARR" volume projection of approximately 59 million tons less than WFA/Basin's projection and a lower projection that mistakenly excludes asserted cross-subsidy traffic.[49]

The difference between BNSF's Full SARR and WFA/Basin's LRR traffic projections arise principally because the parties use different procedures to project LRR's traffic growth in the 2006 to 2009 time period. BNSF proposes to forecast LRR traffic volumes in the 2006 to 2009 time period using a BNSF system-wide internal coal volume forecast.[50] The Board rejected an identical BNSF proposal in Xcel I, ruling that the involved volume forecasts should be made using the Energy Information Administration's ("EIA") most recent Annual Energy Outlook ("AEO") forecast.[51]

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[49] As discussed above and in Part III-A-3-d-i below, there is no basis for BNSF's exclusion of any LRR traffic.

[50] See WFA/Basin Rebuttal Narr. at III-A-13 to 15.

[51] See Xcel I at 53-54.

WFA/Basin properly utilize the most recent EIA projections – the 2005 AEO forecast ("AEO 2005").[52]

The remaining volume differences are attributable to the parties' differing calculations of their plant-specific forecasts. On Rebuttal, WFA/Basin accept BNSF's proposed volume adjustments involving two of the three plants where there are differences in the parties' forecasts.[53] WFA/Basin do not accept BNSF's charges concerning a third plant because BNSF has misapplied the plant's maximum capacity factor.

4. WFA/Basin Correctly Forecast LRR/Residual BNSF Line-Haul Revenues

On Opening, WFA/Basin calculated LRR/residual BNSF line-haul revenues, and line-haul revenue forecasts, using the procedure the Board applied in Xcel I. On Reply, BNSF presents two different approaches to forecasting line-haul revenues that tie into its two different approaches for calculating LRR divisions: an adjusted Modified Straight Mileage Prorate ("MSP") approach and an "avoidable cost" approach.

BNSF generally calculates total line-haul revenues using the same general procedures WFA/Basin employed on Opening, but it includes a few consequential differences intended to arbitrarily reduce LRR revenues:

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[52] See WFA/Basin Rebuttal Narr. at III-A-15.

[53] Id.

- In the absence of controlling pricing documents, WFA/Basin adjust LRR revenues in the 2006 to 2009 time period using the EIA's AEO 2005 PRB price forecasts. BNSF utilize an internal BNSF system-wide forecast. BNSF's procedure was properly rejected in Xcel I.[54]

- LRS Revenue Projections. WFA/Basin demonstrate that BNSF's tariff rate adjustment procedures are unreasonable.[55] Accordingly, WFA/Basin properly forecast the LRS rates by the RCAF-U. BNSF mistakenly forecasts LRS revenues using its unlawful rate adjustment procedures.[56]

- Fuel Surcharge Forecasts. WFA/Basin project BNSF's fuel surcharges, which are based on EIA diesel fuel price projections, using EIA's diesel fuel (distillate) index. BNSF utilize a made for litigation index it calls the "RCAF Fuel Index." WFA/Basin's indexing procedure is superior to BNSF's because it relies on an index prepared by a neutral third party that forecasts diesel fuel prices.[57]

BNSF's avoidable cost approach utilizes the same mistaken procedure BNSF employs to project the LRS rates. The procedure BNSF uses to develop divisions on LRR cross-over traffic is discussed below.

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[54] See WFA/Basin Rebuttal Narr. at III-A-14.

[55] Id. at III-A-19 to 21.

[56] Id.

[57] Id. at III-A-26 to 29.

5. WFA/Basin Properly Calculate LRR Divisions

WFA/Basin calculate LRR divisions using the MSP method. The Board has used MSP, and its predecessor the Modified Mileage Block Prorate ("MMP") methodology, in calculating SAC cross-over traffic divisions in its last nine SAC decisions involving cross-over traffic.[58] In their opening evidence, WFA/Basin demonstrated that application of MSP divisions in this case produces results that are in line with comparable "real-world divisions."[59]

On Reply, BNSF asks the Board not to apply MSP divisions. The burden, of course, is on BNSF to show why application of MSP is not appropriate in this case. As the Board observed in PPL, if a party challenges use of the established method for establishing SARR divisions, the burden is on the party making the challenge to demonstrate that the method should not be employed in the particular case.

> The modified mileage proration process is an accepted and widely used tool for apportioning revenues between carriers. But if that procedure is not appropriate to use in a particular case, the parties to that case can let us know, and we will use whatever is the most appropriate procedure for apportioning revenues for that case.

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[58] See WFA/Basin Op. Narr. at III-A-18 n.30; WFA/Basin Rebuttal Narr. at III-A-29 to 30.

[59] See WFA/Basin Op. Narr. at III-A-18; WFA/Basin Op. Exhibits III-A-3 and III-A-4.

PPL (STB decision served Nov. 27, 2001) at 6 n.18.

The Board reaffirmed the PPL rule in Xcel I. As stated recently by Board counsel:

> In [the Xcel] proceeding, while Xcel asked the Board to follow precedent by using the MSP method of allocating revenues from cross-over traffic, BNSF criticized MSP .... BNSF argued [for an] alternative method.... The burden was on BNSF to make a convincing showing that its alternative approach was superior to the general approach the agency had used since 1994, as there is a "norm of regularity" in government conduct that presumes an agency's duties are "best carried out if the settled rule is adhered to."

Board's Xcel Brief at 52 (footnotes omitted). BNSF utterly fails to meet this burden of proof.

BNSF offers no market evidence to support its position that MSP should not be used in this case. Indeed, BNSF claims that market evidence is irrelevant.[60] Instead, BNSF claims that it has two better methodologies to set divisions: avoidable costs and adjusted MSP.

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[60] BNSF cites the Board's Duke/NS I decision in support of this position. If BNSF's reading of Duke/NS I is correct, the Board mistakenly overruled, sub silentio, twenty years of contrary precedent calling for the establishment of "market based" SARR divisions. See Bituminous Coal – Hiawatha Utah to Moapa, Nevada, 10 I.C.C. 2d 259, 268 (1989) ("Nevada Power II"). See WFA/Basin Rebuttal Narr. III-A-32.

BNSF's avoidable costs approach assumes that a SARR is a competitor of the residual incumbent, with the resulting competition between the SARR and the residual incumbent producing SARR divisions equal to BNSF's "avoidable costs" of providing SARR service. BNSF calculates the "avoidable costs" as equaling its URCS variable service costs.[61]

BNSF's avoidable cost divisions theory must be rejected out of hand.[62] It is predicated on a misguided premise – i.e. the SARR is a competitor of the incumbent. The ICC and the Board have repeatedly rejected this premise.[63] And, the results – SARR revenue divisions set at the incumbent's variable service costs – also have been uniformly rejected by the ICC and the STB. As the Board observed in Duke/NS I, setting cross-over divisions "down close to [the incumbent carrier's] variable cost levels" would require that non-cross-over traffic "bear[] most of the fixed cost of the [SARR]" producing an "end result [that] would deprive each complainant shipper of the benefit of grouping traffic (i.e. realizing the economies of scale, scope and density) held out to them in Guidelines." Id. at 19.

[61] See BNSF Reply Narr. at III.A-50. BNSF proceeds to adjust its avoidable costs divisions' future periods using the RCAF-A. Id.

[62] WFA/Basin's divisions evidence is co-sponsored, in part by two of the Nation's leading transportation economists – Dr. Curtis Grimm and Dr. George Borts.

[63] See WFA/Basin Rebuttal Narr. at III-A-32 to 33.

BNSF's second approach, a modified version of MSP, is even worse. Under BNSF's modified MSP approach, the MSP 100 mile origin mileage block is reduced to 25 miles for movements in shipper-provided cars[64] and 57 miles for movements in railroad-provided cars. Application of BNSF's modified MSP produces divisions that are lower than BNSF's avoidable cost divisions – i.e. less than BNSF's variable costs.[65]

BNSF purports to justify reduction of the 100-mile origin block to a 25-mile block on "cost" grounds. However, the 100-mile block is derived from the Board's waybill sample – which uses the block to calculate market-based divisions, not cost-based divisions.[66] Moreover, BNSF presents no evidence of the "relative costs" BNSF would incur to provide service over the on-SARR and off-SARR route segments. See Duke/NS I (suggesting the Board might consider alternatives to MSP predicated upon appropriate "relative cost" studies.)[67]

In this case, the Board is given a choice – set divisions using MSP (the method used in the last nine rate cases) or set divisions using two methodologies that have never been used in prior cases, have no theoretical support, and produce results

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[64] Most of the LRR's cross-over traffic moves in shipper-provided cars.

[65] See WFA/Basin Rebuttal Narr. at III-A-43.

[66] Id. at III-A-44.

[67] Duke/NS I at 20.

repeatedly rejected by the ICC and the Board. The choice for the Board to make is clear – MSP.

6. The LRR's Network and Operating Plan are Conservative and have Largely been Accepted by BNSF

As WFA/Basin explained on Opening, the LRR network configuration and the LRR operating plan are far more conservative than the networks and operating plans proposed by the complainants in other coal rate cases. On Reply, both the LRR's main-track and yard configuration and its operating plan, as proposed by WFA/Basin, have been accepted by BNSF virtually in their entirety. See Parts III-B-2, III-B-3 and III-C-2 below and WFA/Basin Rebuttal Exhibit III-C-1.[68]

WFA Basin's operating plan has been thoroughly explained and documented by WFA Basin's team of experienced rail operations experts, Paul Reistrup and Paul Smith. Mr. Reistrup, a former President of Amtrak and a high-level executive of various railroads including CSXT and its predecessors, is well-known to the Board. Mr. Smith has a strong western railroad operating background; he is a former DRGW and SP operating officer and locomotive engineer who has extensive practical experience with the operation of unit coal trains. Mr. Reistrup's and Mr. Smith's operating plan has been tested and verified using the Rail Traffic Controller ("RTC") Model, a commercially-available and widely-accepted dispatching model used for simulating train operations and

[68] This exhibit lists 32 aspects of WFA/Basin's operating plan for the LRR that BNSF has accepted.

rail facility capacity. The inputs to the model (primarily elements of the operating plan) are realistic and in many instances conservative. See Part III-C-1 and III-C-2 below.

WFA/Basin have done everything the Board has asked complainants to do in SAC rate cases. They have relied on a commercially-accepted dispatching model, they have made reasonable and realistic assumptions with respect to the inputs to that model (almost all of which BNSF has accepted), and they have relied heavily on Board precedents in preparing their operating plan.

On Opening, WFA/Basin showed that the LRR's operating plan is capable of handling a crippling broken-rail incident in an area of high-density single main track between Orin Jct. and Guernsey in the peak traffic week, and also that the RTC simulation ran well with randomized train start and departure times.[69] The RTC Model tends to be sensitive to modest changes in assumptions, and BNSF made some significant changes for purposes of its Reply RTC simulation. Yet the RTC Model still ran to completion in BNSF's Reply simulation.[70] This demonstrates how robust WFA/Basin's network configuration and operating plan are. There is no question that WFA/Basin have carried their burden of proving the LRR's network and operating plan to be feasible.

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[69] See WFA/Basin Op. Narr. at Part III-C-2-c and -d and WFA/Basin Op. Exhibit III-C-5.

[70] See BNSF Reply Narr. at III.B-8 and III.B-48 and WFA/Basin Rebuttal Narr. at III-B-21 to 22.

Having failed to find a fatal flaw in WFA/Basin's operating plan, BNSF attempted to slow the system (train cycle times) down in an effort to increase the LRR's operating costs and capital requirements. BNSF did this by using absurdly conservative assumptions – including assumptions concerning the presence of UP trains at PRB mines that the Board has rejected in other SAC cases, in particular TMPA I.[71] On Rebuttal, WFA/Basin make a few changes in the operating inputs to the RTC Model in direct response to BNSF's evidence, which placed additional burdens on the LRR network compared with the Opening simulation. The cycle times produced by the Rebuttal RTC simulation, with even more conservative assumptions than the Opening simulation in terms of train dwell times, random outages, etc., are comparable to those resulting from the Opening RTC simulation – thus further demonstrating the feasibility of the LRR network and operating plan. See WFA Rebuttal Narr. at III-C-58 to 60.

7. WFA/Basin's Calculations of the LRR's Annual Operating Expenses – Unlike BNSF's Calculations – are Consistent with Board Precedent

WFA/Basin demonstrate in Part III-D below that their calculation of the LRR's annual operating expenses is both conservative and consistent with Board precedent in other SAC rate cases involving PRB coal movements. BNSF, on the other hand, has inflated the LRR's annual operating expenses far beyond plausibility. This is

[71] See WFA/Basin Rebuttal Narr. at III-C-25 to 56.

true with respect to both the overall annual expenses and various individual expense categories.

The following table, which replicates a table in Part III-D-1 below, demonstrates that WFA/Basin's operating-expense calculations are consistent with Board precedent and that BNSF's calculations are not:

Rebuttal Table I-3
SARR Base-Year Operating Expense Per Track Mile

Item	**TMPA**	**Xcel I**	**LRR-BNSF**	**LRR-WFA/Basin**
Track Miles	2,243.70	679.07	462.53	446.36
Operating Expense[1/] ($ millions)	$382.65	$149.40	$168.90	$110.75
OE per track mile ($ millions)	$158,912	$220,000	$365,166	$248,123

[1/] Excludes startup and training costs.

The above comparison between the Board's recent findings in the Xcel case and the parties' evidence in this case is particularly telling. The Xcel SARR had 47 percent more track miles than the LRR, and 69 percent more route miles. Yet its total annual operating expense as determined by the Board is nearly $20 million lower than the LRR's annual operating expense as calculated by BNSF. On the other hand, WFA/Basin's operating expense per track mile (from Part III-D below) is higher than the Xcel figure. It is clear from this comparison that WFA/Basin's operating-expense calculation is reasonable, whereas BNSF has inflated the LRR's operating expenses to extreme levels in an attempt to justify its huge rate increase on WFA/Basin's LRS coal traffic.

Another example showing that WFA/Basin's calculation of annual operating expense is consistent with Board precedent, and that BNSF's is not, lies in the parties' respective calculations of the LRR's annual General and Administrative ("G&A") expense. This is one of the largest areas of expense difference between WFA/Basin and BNSF. These calculations, and a comparison with the Board's findings in Xcel, are set forth in the following table.[72]

Rebuttal Table I-4
Comparison of Base-Year G&A Personnel and Costs

Item	Xcel[1/]	BNSF	WFA/Basin
Route miles	396	219	218
G&A Personnel	51	78	50
Total G&A Expense	$10.4 million	$26.88 million	$10.01 million

[1/] Xcel I at 58, 65.

The Xcel case involved a coal-only SARR that was very similar to the LRR. The Xcel SARR traversed the same route as the LRR between the PRB mines and Guernsey, and extended from Guernsey into northeastern Colorado. The traffic groups of the two SARR's are very similar, consisting entirely of coal moving in unit trains. The Board's G&A findings in Xcel I thus provide an excellent benchmark for assessing the

[72] The LRR's G&A expenses are described in detail at pp. III-D-45 to 114 below.

parties' positions on G&A expenses in this case.[73] They demonstrate that WFA/Basin's calculation of G&A expenses is reasonable, whereas BNSF's calculation is highly inflated.

Another major area of difference between the parties involves the calculation of the LRR's annual MOW expenses. Again, a comparison of the parties' positions on the LRR's MOW personnel and annual operating expense with the Board's findings in Xcel is instructive:

Table I-5
Comparison of MOW Personnel and Annual Operating Expense

Item	Xcel I	LRR-BNSF	LRR-WFA/Basin
MOW Managers	13	14	14
MOW Field Employees	166	120	82
Track Miles Per Field Employee	4.09	3.85	5.44
Base Year Operating Expense	$22.75M	$18.75M	$10.08M
Base Year OE Per Track Mile	$33,501	$40,564	$22,630

WFA/Basin's MOW plan calls for slightly more track-miles per field employee, and lower annual operating expense per track-mile, than those reflected in the Xcel I decision. However, in Xcel I the Board accepted BNSF's proposed MOW

[73] In its reply evidence BNSF purports to benchmark the LRR's G&A staff and expenses with a "peer group" of real-world railroads. However, as WFA/Basin demonstrate in Part III-D-3-c below, no currently operating real-world railroad is comparable to a SARR that handles a single commodity exclusively in unit-train service.

personnel and annual operating expense virtually lock, stock and barrel. It did so because the complainant in Xcel – unlike WFA/Basin – did not adequately support its proposed staffing and operating-expense levels. Id. at 77-80. On the other hand, BNSF's proposed annual MOW operating expense per track-mile in this case is 21 percent higher than the number accepted by the Board in Xcel. This is surprising as the LRR follows much of the same route and carries essentially the same traffic as the SARR in Xcel.

As WFA/Basin demonstrate in Part III-D-4 below, their highly-qualified team of expert MOW witnesses has developed a feasible and well-supported MOW plan for the LRR. This team consists of four experts with many years of experience, at both the field and supervisory level, in maintaining heavy-haul railroads in the West and in the East, including DRGW/SP, UP, CNW/WRPI, Conrail/NS, and B&O/CSXT. Their MOW plan was designed to accommodate the specific traffic levels and maintenance needs of the LRR, without the need to comply with the rigid craft rules of unionized Class I railroads such as BNSF.

On Reply, BNSF accepted several key aspects of WFA/Basin's MOW plan, including the field track-maintenance districts and crew sizes. However, BNSF proposed substantial increases in specialized field MOW forces and equipment. These proposals are not based on the specific maintenance needs of the LRR, but rather on BNSF's own real-world practices particularly with respect to the PRB Joint Line. That line, however, was poorly constructed in some respects, and it also carries more than double the coal traffic volume than the LRR will carry in its peak traffic year.[74]

The test of the feasibility of WFA/Basin's MOW plan is not what BNSF does on a real-world line that carries far more traffic than the LRR will carry, but whether that plan is feasible for a least-cost, efficient, non-unionized SARR. As stated by the Board:

> [W]e remind parties that a railroad's SAC evidence should be limited to addressing deficiencies in the complaining shipper's evidence. It is not sufficient for a railroad to show that another way of providing service would be superior, because the purpose of a SAC analysis is to identify the ***least*** cost at which the current level of service for each member of the traffic group could be provided. [Emphasis in original.][75]

WFA/Basin's MOW experts are well-acquainted with the Joint Line, and with other lines that carry high volumes of coal traffic. The Joint Line is a very busy piece of the Western rail network that has to accommodate numerous coal trains operated by two large railroads. However, as explained in Part III-D-4-a below, the Joint Line has special maintenance needs that arise from the manner in which it was constructed, the problems caused by coal dust that has been allowed to accumulate in the ballast and subgrade over a period of more than 20 years, and the fact that for several years the Joint Line has carried more than twice as much coal traffic as the LRR will carry in its peak

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[74] See WFA/Basin Rebuttal Narr. at III-D-119 to 122.

[75] See General Procedures at 6.

traffic year. BNSF's proposed MOW staffing and procedures for the LRR are based entirely, and inappropriately, on the present real-world situation with the Joint Line as well as BNSF's use of a unionized work force organized along rigid craft lines to maintain its track and other facilities.

8. WFA/Basin's SARR Road Property Investment Costs are Well-Supported and Consistent with Board Precedent

WFA/Basin's Opening road property investment presentation was comprehensive, well-supported by a variety of sources, and backed up by the extensive practical experience of its engineering witnesses. Their calculation of the LRR's road property investment costs was also consistent with Board precedent. BNSF, on the other hand, attempts to increase the LRR's road property investment costs well beyond the bounds of reason and its calculations are inconsistent with Board precedent. This is demonstrated by Rebuttal Table I-6 below.[76]

[76] The numbers in the "WFA/Basin" column are from its Rebuttal calculation of road property investment costs. WFA/Basin's Rebuttal costs rose less than five percent from Opening; most of the increases stemmed from various calculation corrections described in Part III-F below.

Rebuttal Table I-6 SARR Base-Year Road Property Investment Per Track Mile ($ Millions)				
Item	**TMPA**	**Xcel I**	**LRR-BNSF**	**LRR-WFA/Basin**
Track Miles	2,243.70	679.07	462.53	446.36
Road Property Investment	$4,097.1	$1259.8	$1,379.3	$ 817.9
Investment Per Track Mile	$1.83	$1.86	$2.98	$1.83

Although BNSF disputed a large number of construction-cost items, most of BNSF's increase is based on two flawed theories. First, BNSF argues that the LRR must be built to the same specifications that BNSF uses when building new track on the PRB Joint Line. Second, BNSF argues that the LRR must build nearly $300 million in right-of-way retaining walls in order to stay within a 100-foot right-of-way at all times.

The LRR is not replicating the Joint Line traffic volume. The PRB Joint Line already handles nearly 2.5 times the annual gross tonnage (including UP tonnage) that the LRR will move in its peak year. See Rebuttal Table III-F-2 below. Over the 20-year DCF period, the LRR will carry billions of gross tons less than the Joint Line will during the same period. Id. In other words, BNSF's current Joint Line construction specifications, which include concrete ties, 141-pound rail and other expensive items, are designed for track that carries far more tonnage than the LRR does. The LRR's infrastructure, as proposed by WFA/Basin, is similar to the infrastructure that BNSF and UP have used for more than 20 years, and that Norfolk Southern uses today, on coal lines with densities similar to the LRR.[77] WFA/Basin's design for the LRR is feasible and well-supported, and serves the LRR's traffic group in an efficient, least-cost manner.

BNSF also undermines its infrastructure arguments by actually constructing the LRR using different specifications in different areas, including some that are consistent with WFA/Basin's designs and some that are consistent with BNSF's current specifications for the Joint Line. For example, BNSF accepts the use of a 24-foot roadbed for one of the densest segments of the LRR (Bridger Junction to Guernsey, which will carry 154 million gross tons per mile ("MGT/M") in 2024), but it insists on 28-foot roadbeds for segments with much less density than the 24-foot roadbed locations (E. Fortin to W. Campbell, 10 MGT/M). BNSF's Jekyll-and-Hyde construction approach is illogical and results in needless extra expense.

In an obvious attempt to inflate the LRR's construction costs to the maximum extent possible, BNSF also proposes nearly $300 million in construction costs for extra right-of-way retaining walls. BNSF bases this preposterous investment on its theory that, by its calculations, the LRR's roadbed width will exceed 100 feet on average on the Orin, Campbell and Reno Subdivisions, and as result more land will be needed. But instead of adding the land, which would cost only about $500,000, BNSF instead

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[77] See Xcel I at 34; Public Service Company of Colorado d/b/a Xcel Energy v. Burlington Northern and Santa Fe Ry., STB Docket No. 42057 (STB served Jan. 19, 2005) ("Xcel II") at 15-16; Carolina Power & Light Co. v. Norfolk Southern Ry., STB Docket No. 42072 (STB served Dec. 23, 2003)("CPL") at 28; TMPA I at 161.

proposes to build mile after mile of retaining walls which cost over $295 million, arguing that the LRR would not purchase any right-of-way greater than 100 feet in width. As explained in detail in Part III-F-2-f below, the 100-foot right of-way-width is an average, not a maximum, and in any event BNSF's proposed solution is an absurd most-cost solution, not a least-cost solution, and thus is inconsistent with SAC theory.

WFA/Basin's Rebuttal road property investment costs are feasible and well-supported in Part III-F below. BNSF's Reply investment costs are out of touch with the investment costs the Board has accepted in other SAC proceedings involving SARRs that replicated the same BNSF lines the LRR is replicating – particularly the Xcel proceeding. This is graphically illustrated in Table I-6 above, which shows that BNSF's proposed road property investment costs for the LRR are 60 percent higher per track mile than those determined by the Board for the SARR in Xcel I. The Board should adopt WFA/Basin's Rebuttal road property investment costs as the best evidence of record.

9. WFA/Basin Properly Apply the Board's DCF Model

WFA/Basin and BNSF both utilize the Board's DCF model to calculate LRR revenues and costs over the twenty year DCF period. However, BNSF endeavors to further inflate LRR costs by using the wrong index to forecast inflation-adjusted LRR operating costs and makes other errors in applying the Board's DCF procedures.

- Indexing Operating Costs. In prior cases, the Board has ruled that use of the RCAF-A to forecast SARR operating costs understates SARR cost increases and that use of the RCAF-U to forecast SARR operating costs overstates SARR cost increases.[78] WFA/Basin develop an alternative that is designed to produce a forecast { } over the twenty year DCF period. On Opening, that { } was captured using an index that changed at 53% of the Global Insight forecasted change of the RCAF-U ("0.53 RCAF-U").[79] On rebuttal, WFA/Basin utilized { } and the { } has changed to 59% of the forecasted change of the RCAF-U ("0.59 RCAF-U").[80]

In its reply evidence, BNSF claims – without any evidence or support – that the 0.53 RCAF-U overstates LRR productivity gains and understates the LRR's expected inflation-based operating cost increases. BNSF proposes an alternative approach where the RCAF-U is applied to forecast LRR operating costs expenses through 4Q 2014 and thereafter a "hybrid RCAF" is applied. BNSF's hybrid RCAF includes a very small productivity factor.[81]

BNSF's assumption that the LRR will enjoy no productivity gains through 2014, and extremely little productivity gains thereafter, is absurd. WFA/Basin's 0.59

[78] See WFA/Basin Op. Narr. at III-G-4 to 5.

[79] See WFA/Basin Op. Narr. at III-G-14.

[80] See WFA/Basin Rebuttal Narr. at III-G-7 to 8.

[81] See BNSF Reply Narr. at III-G-3 to 17.

RCAF-U index – an index endorsed by Dr. Douglas W. Caves, one of the nation's leading experts in rail productivity – is far superior because it is based on a realistic forecast of the LRR's productivity-adjusted operating cost increases.[82]

- Other DCF Issues. WFA/Basin, unlike BNSF, properly exclude an "equity flotation" charge in their capital cost calculations;[83] properly capitalize the LRR's initial hiring and training costs;[84] properly amortize LRR debt over the life of the LRR assets,[85] properly capitalize rail grinding costs;[86] and properly capitalize maintenance-of-way work equipment costs.[87]

D. WFA/BASIN ARE ENTITLED TO SUBSTANTIAL RATE RELIEF

WFA/Basin are entitled to substantial rate relief in this case. The Board is presented with five different proposed methods to allocate that relief: the current percentage reduction method; the Reasonable Allocation Method ("RAM"); the Reduced Mark-Up method; an avoidable cost method; and a modified percentage reduction

[82] See WFA/Basin Rebuttal Narr. at III-G-7 to 34.

[83] Id. at III-G-3 to 5.

[84] Id. at III-G-39 to 41.

[85] Id. at III-G-36 to 39.

[86] Id. at III-G-41 to 43.

[87] Id. at III-G-43 to 44.

method. The correct choice in this case is the RAM method or the Reduced Mark-Up method.

1. **The Board Should not Apply <u>its Percentage Reduction Method</u>**

On Opening, WFA/Basin demonstrated the many flaws in the Board's percentage reduction method. The principal flaw in the percentage reduction method is that the carrier's starting rate dictates the resulting SAC rate.[88] On Reply, BNSF does not dispute this unassailable fact. Instead, BNSF attempts to sashay around it by claiming it is a benign monopolist imposing only "commercially reasonable" rate increases. The record in this case belies BNSF's "benign monopolist" claim – it is clear that WFA/Basin have been hit with draconian rate increases and rate payments that are anything but "reasonable."[89] However, as WFA/Basin emphasized in their Opening filing, BNSF's subjective intent and its monopoly aspirations are irrelevant. What is relevant is the regulatory process. The Board cannot have a fair maximum rate process if it cedes the power to set the SAC answers to the regulated carrier.[90] BNSF is obviously aware of this

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[88] <u>See</u> WFA/Basin Op. Narr. at III-H-6 to 31.

[89] <u>See</u> 49 U.S.C. §10701(d)(1) (directing the Board to determine whether rates on market dominant traffic are reasonable). <u>Farmers Union Cent. Exch. Inc. v. FERC</u>, 737 F.2d 1486, 1507 (D.C. Cir. 1984) (holding that agencies charged with determining maximum rates must engage in "meaningful rate regulation").

[90] <u>See</u> WFA/Basin Rebuttal Narr. at III-H-4.

loophole in the Board's SAC Guidelines and, in each new case, BNSF sets higher and higher tariff rates – knowing that a high start guarantees a high finish.[91]

2. RAM and Reduced Mark-Up Provide Reasonable Means to Set Movement-Specific LRR SAC Rates

The Board has acknowledged the obvious problems with percentage reduction and asked parties to propose alternatives that "remove the flaws" in percentage reduction. See CPL I at 32; Xcel I at 38.

WFA/Basin's RAM methodology "removes the flaws" in percentage reduction because, unlike percentage reduction, it does not use a carrier's initial tariff rate as the starting point for determining maximum rate relief. Instead, RAM utilizes a "bottom-up" approach. Under RAM, each LRR shipper pays its variable costs. Captive LRR shippers pay an additional sum equal to a pro-rata share of the non-attributable LRR costs (i.e., the difference between the total LRR SAC costs and the LRR system variable traffic costs). RAM also contains a default rule – no shipper is required to pay more than its current rate.[92]

BNSF attacks RAM as a method that is inconsistent with the Coal Rate Guidelines and one that has been rejected in prior cases. WFA/Basin address BNSF's arguments in detail in Part III-H below. Suffice it to say here that BNSF's contentions

[91] See WFA/Basin Op. Narr. at III-H-10 to 13.

[92] See WFA/Basin Rebuttal Narr. at III-H-14.

are flat-out wrong. The Guidelines were developed with the RAM approach in mind; the ICC actually utilized procedures that RAM is based upon in deciding the first two major post-Guidelines coal rate cases (OPPD[93] and APL[94]); and neither the ICC nor the Board rejected this approach in subsequent cases for a simple reason – the approach was not presented in those cases. WFA/Basin urge the Board to utilize RAM in this case.

WFA/Basin present a second alternative, as well – the Reduced Mark-Up method. Under the Reduced Mark-Up method, the profit contribution made by each LRR shipper is calculated. The profit contribution equals the difference between the revenues paid by each LRR shipper and the variable costs the LRR incurs to provide that shipper with service. The contribution is then reduced on a pro rata basis so that LRR revenues equal LRR costs.[95]

Unlike RAM, the Reduced Mark-Up method does not fully solve the "starting rate" problem since under the Reduced Mark-Up method, like percentage reduction, the starting rate influences the SAC answer. However, the Reduced Mark-Up method minimizes the impact of the starting rate since the method accords the most relief to the shippers making the highest profit contribution to the LRR – e.g. WFA/Basin.

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[93] Omaha Public Power District v. Burlington Northern R.R., 3 I.C.C.2d 123 (1986) aff'd on appeal 3 I.C.C. 2d 853 (1987).

[94] Arkansas Power & Light Co. v. Burlington Northern R.R., 3 I.C.C.2d 757 (1987).

[95] See WFA/Basin Op. Narr. at III-H-34; WFA/Basin Rebuttal Narr. at III-H-14.

BNSF's principal criticism of the Reduced Mark-Up method is that it is "inconsistent" with RAM. However, that is not the case. RAM takes a broad, long-term view of rail captivity and groups the LRR's captive coal shippers together because they clearly possess similar transportation demand elasticities.[96] The Reduced Mark-Up method, on the other hand, takes a snapshot approach, focusing on current R/VC relationships. These relationships, of course, can change dramatically over time without any change in the shipper's underlying transportation captivity, as is evidenced by the dramatic change in the R/VC ratios in the LRS traffic in 2004 after the LRS contract expired.[97] BNSF raises a few other make-weight arguments about the Reduced Mark-Up method that WFA/Basin address in detail in Section III-H below.[98]

3. BNSF's Proposed Methods to Calculate Movement-Specific LRR Maximum Rates Must be Summarily Rejected

BNSF proposes to set movement-specific LRR maximum rates using either its "avoidable cost" approach or a modified percentage reduction approach. Both approaches are utterly meritless and designed with only one purpose in mind – to ensure WFA/Basin obtain no rate relief.

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[96] See WFA/Basin Op. Narr. at III-H-24 to 28; WFA/Basin Rebuttal Narr. at III-H-16.

[97] See WFA/Basin Rebuttal Narr. at III-H-35 n.84.

[98] Id. at III-H-34 to 37.

Under BNSF's avoidable cost approach, if LRR SAC revenues exceed LRR SAC costs, the overage is used to reduce the LRS rates.[99] Of course, BNSF's avoidable cost divisions approach ensures LRR revenues will never exceed LRR costs since, under that approach, the LRS's traffic (by itself) must cover most of the LRR's fixed costs.[100]

Similarly, under BNSF's modified percentage reduction approach, both on-SARR and off-SARR rates are reduced if on-SARR SAC revenues exceed on-SARR SAC costs. This approach violates the basic SAC tenant that on-SARR revenues be reduced to equal on-SARR costs.[101] And, like BNSF's avoidable cost approach, it is intended solely to ensure a complainant shipper obtains no meaningful rate relief.

E. BNSF'S TARIFF RATE ADJUSTMENT PROCEDURES ARE UNLAWFUL

WFA/Basin demonstrated in their opening evidence that BNSF's convoluted mechanism to adjust its initial tariff rates constitutes an unreasonable practice. This procedure simply lops an additional $500 million in rate payment on top of initial rate payments that are unreasonably high to begin with.[102]

WFA/Basin's challenge to BNSF's tariff rate adjustment procedures is fully supported by governing precedent. On Reply, BNSF ignores this precedent and in effect

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[99] Id. at III-H-38.

[100] Id.

[101] Id. at III-H-39.

[102] See WFA/Basin Op. Narr. at I-30 to 32.

argues that BNSF's rate adjustment procedures are immune from challenge.[103] That is not the law. The Board should apply governing law and set aside BNSF's clearly unreasonable tariff rate adjustment procedures.

F. THE PUBLIC INTEREST SUPPORTS WFA/BASIN'S RELIEF REQUESTS

Throughout its opening and reply evidence, BNSF makes various side-bar "public interest" pitches to support its perceived entitlement to gouge WFA/Basin's rural electric and small municipal consumers. BNSF's pitches include:

- Revenue Adequacy. BNSF claims that it is entitled to a massive rate increase because of its revenue inadequate status. BNSF's "revenue inadequacy" claims are predicated on the Board's controversial rules for determining revenue adequacy.[104] BNSF makes representations of "revenue inadequacy" to Wall Street. For example, BNSF repeatedly hypes its "record profits" in reports to its shareholders and assures the SEC that it has "sufficient" funds now, and in "the foreseeable future" to "meet its obligations when due" and "to fund capital additions."[105]

In any event, the STB, and its predecessor the ICC, have consistently ruled that BNSF's "revenue inadequacy" status under the Board's revenue adequacy standards

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[103] See WFA/Basin Rebuttal Narr. at III-H-42.

[104] See WFA/Basin Reply Narr. at I-7 to 10.

[105] See also Frank N. Wilner, A Tale of Two (Railroads) Stories – Journal of Transp. Law, Logistics and Policies 235 (2005), WFA/Basin Rebuttal electronic workpaper "Ataleoftworailroads.pdf."

does not grant BNSF a license to charge whatever it wants on captive traffic. See, e.g. Coal Rate Guidelines at 536 ("a rate may be unreasonable even if the carrier is far short of revenue adequacy"); Xcel II at 6 (same). And the reasonable rates WFA/Basin ask the Board to prescribe greatly contribute to BNSF's revenue needs.

In 2004, BNSF's system-average R/VC ratio equaled 131%.[106] In order to be considered revenue adequate in 2004 under the Board's revenue adequacy rules, BNSF needed to obtain a system-average R/VC ratio of 144%. Rates prescribed at the levels WFA/Basin request here produce R/VC ratios that average 244% in 4Q04. These rates generate a very handsome revenue contribution to BNSF.

- Commercial Reasonableness. Running throughout BNSF's opening and reply filings is one common refrain: BNSF's massive pricing increases are "commercially reasonable." BNSF repeatedly tries to paint the picture that it is a "benign" monopolist acting only in a "reasonable" manner. WFA/Basin present extensive evidence in both their Reply and Rebuttal filings demonstrating that BNSF is anything but a benign monopolist. The record graphically demonstrates this. Benign monopolists do not impose $1 billion dollar increases, charge rates for unit-train coal traffic that start at 38+ mills and increase to over 80 mills, etc.[107]

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[106] See WFA/Basin Reply electronic workpaper "BNSF 2004 R/VC Ration_001.pdf."

[107] WFA/Basin's Rebuttal Exhibit I-1 graphically confirms these points. This chart shows the LRR tariff rates under challenge, the rates paid by the other LRR traffic group members, and the maximum SAC rates calculated by WFA/Basin and BNSF. The rates

- Gaming. BNSF also repeatedly accuses WFA/Basin of "gaming" the SAC process. As discussed above, and in detail below in Part III. WFA/Basin seek only the relief they are entitled to under the Guidelines. It is BNSF – not WFA/Basin – that seeks to manipulate the SAC process in this case by charging extraordinarily high tariff rates and by presenting the Board with highly inflated SAC costs and arbitrarily deflated SAC revenues.

BNSF also ignores the massive outpouring of public interest in, and concerns about, its draconian pricing actions. For example, the 200+ member cooperative, municipal, and public power systems served by LRS submitted a joint letter to the Board. These customers characterize BNSF's massive rate increases as "a real threat to the success of the Laramie River project." They also confirm that "BNSF's rate actions are ... very significant" and, if left unchecked, will have a disproportionate effect on "modest income families, ranchers, farmers, and small businesses, [including] many customers liv[ing] below the poverty level, that cannot afford any increases in essential electricity services."

The concerns raised by LRR customers are shared by their elected representatives. Twenty western state Senators and Congressman have written a joint letter to the Board emphasizing that "[r]easonable rail rates for transportation are critical to ensuring Laramie River is able to generate low-cost electricity to serve its customers."

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are arrayed on a mills per-ton mile basis.

They "urge the Board to engage in a balanced and fair application of governing law, and adhere to its statutory directive that rates on captive traffic 'must be reasonable.'" Three other western state Senators, the Governors of Wyoming, South Dakota and North Dakota, and the Attorneys General of North Dakota and South Dakota also have submitted similar letters expressing their grave concerns over BNSF's pricing actions – as have the chief executive officers of American Public Power Association and the National Rural Electric Cooperative Association.

The Board correctly observed in Xcel II that the Board is not "a passive arbitrator but the guardian of the general public interest, with a duty to see that this interest is at all times effectively protected."[108] The general public interest – as reflected in the outpouring of consumer concerns discussed above – fully supports the relief WFA/Basin request.

G. REQUESTED RELIEF

WFA/Basin request the STB to prescribe maximum rates equal to $337 per ton in 4Q04 (calculated using RAM) and thereafter to order BNSF to charge an amount not to exceed the greater of the jurisdictional threshold rates or the SAC rates (calculated using RAM) shown in Table I-7 below.[109]

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[108] Id. at 4 (internal quotations and citation omitted).

[109] WFA/Basin have no objection to the Board prescribing maximum rates using the alternative Reduced Mark-Up methodology. These rates are set forth in WFA/Basin Rebuttal electronic workpaper "LRR Mark-up Rate Reduction_Rebuttal.xls."

TABLE I-7 MAXIMUM SAC RATES	
Time Period	SAC Rate
4Q 2004	$3.37
2005	3.16
2006	3.16
2007	3.08
2008	3.13
2009	2.97
2010	3.01
2011	3.06
2012	3.10
2013	3.15
2014	3.20
2015	3.26
2016	3.35
2017	3.43
2018	3.51
2019	3.57
2020	3.66
2021	3.75
2022	3.83
2023	3.90
1Q-3Q 2024	3.95

WFA/Basin further request that the Board award reparations, plus applicable interest, for overcharges imposed from October 1, 2004 forward. These overcharges equal $6,435,822 for 4Q04 shipments (exclusive of interest).[110]

[110] See WFA/Basin Rebuttal Exhibit III-H-3.

Finally, WFA/Basin request the Board to order BNSF to strike the surcharge and rate adjustment provisions in the LRS tariff and further direct BNSF not to take any actions to adjust the maximum prescribed rates.

Respectfully submitted,

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Dated: September 30, 2005

<u>CERTIFICATE OF SERVICE</u>

I hereby certify that on this 30th day of September, 2005, I caused a copy of the foregoing Rebuttal Evidence of Complainants Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc. to be served by hand delivery on counsel for BNSF, as follows:

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II-A Quantitative
Market Dominance

II. A. QUANTITATIVE EVIDENCE

1. Variable Costs

In their opening and reply evidence, both WFA/Basin and BNSF developed variable costs for all BNSF movements from the PRB to LRS in the fourth quarter of 2004 ("4Q04"). These movements comprise five separate origin/destination ("O/D") pairs: Dry Fork to LRS; Eagle Butte to LRS; Cordero to LRS; Caballo Rojo to LRS and Jacobs Ranch to LRS.

Rebuttal Table II-A-1 compares the parties' 4Q04 variable cost calculations:

Rebuttal Table II-A-1
Comparison of WFA/Basin and BNSF Reply Evidence Variable Cost Calculations For BNSF Movements to LRS (4Q04)

Origin (1)	BNSF Variable Cost $/ton (2)	WFA/Basin Variable Cost $/ton (3)	Difference (Col. 2-Col. 3) $/ton (4)
Dry Fork	$2.04	$1.42	$0.62
Eagle Butte	2.10	1.47	0.63
Cordero	1.83	1.28	0.55
Caballo Rojo	1.85	1.29	0.56
Jacobs Ranch	1.73	1.22	0.51

In this section of its rebuttal evidence, WFA/Basin demonstrate that BNSF's variable cost calculations are substantially overstated. WFA/Basin also restate their Reply variable cost calculations, where appropriate. WFA/Basin's Rebuttal variable costs are summarized in Rebuttal Table II-A-2 below.

Rebuttal Table II-A-2 WFA/Basin Rebuttal Variable Cost Calculations For BNSF Movements to LRS (4Q04)	
Origin	**Rebuttal Variable Cost Per Ton ($)**
Dry Fork	$1.45
Eagle Butte	$1.50
Cordero	$1.31
Caballo Rojo	$1.31
Jacobs Ranch	$1.24

a. General Cost Estimation Procedures

Both BNSF and WFA/Basin develop base year URCS unit costs. However, on Opening, the parties' base years differed. WFA/Basin's base year was 2004.[1] BNSF's base year was 2003.[2] On Reply, BNSF, like WFA/Basin, utilizes a 2004 BNSF URCS. However BNSF's 2004 URCS does not correctly account for one special charge. BNSF also fails to use the proper URCS linking factor.

i. 2004 URCS Special Charge

BNSF argues in reply that WFA/Basin's 2004 URCS contains a conceptual "error" because, according to BNSF, "WFA/Basin inexplicably exclude from their URCS

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[1] See WFA/Basin Op. electronic workpaper "BNSF 0490.ZIP."

[2] See BNSF Op. electronic workpaper "BNSF URCS 2003.ZIP."

more than $400 million of BNSF's actual freight expenses reported in [BNSF's] 2004 R-1."[3]

BNSF is correct that WFA/Basin excluded the referenced $400+ million in expenses. BNSF is wrong in its assertion that exclusion of these expenses is an "error." The monies in question are a special charge entry of $465 million BNSF recorded in its 2004 R-1 Schedule 410. The special charge was recorded for asbestos claims.[4]

The STB's staff develops an URCS for each Class I railroad for each calendar year. STB staff policy, as endorsed by the Board, excludes special charge amounts from URCS calculations if the special charges were not incurred in the year they are recorded. The STB has summarized this policy as follows:

> Our staff's policy, which we confirm is our policy, has been to exclude a rail-related special charge as a recognizable expense in URCS only when (and then only to the extent that) the charge recorded in a particular year relates to expenses that will be, or should have been, incurred in other years. Thus, what railroads have labeled as special charges have often been excluded from URCS because the expenses were not incurred in the years in which they were recorded.

Western Coal Traffic League v. Union Pacific RR. Co., 4 S.T.B 685, 694-95 (2000) (footnotes omitted).

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[3] See BNSF Reply Narr. at II-4.

[4] See WFA/Basin Rebuttal Workpapers, pp. 2-10.

STB staff has determined that BNSF actually paid only $23 million in asbestos claims in 2004. Accordingly, the STB staff will be reducing BNSF's $465 million special charge to $23 million for inclusion in the Board's 2004 BNSF URCS.[5] On Rebuttal, WFA/Basin include this $23 million charge in its 2004 BNSF URCS.

ii. Linking Factor

In their opening and reply evidence, WFA/Basin applied the URCS linking factor of 0.9934 to their URCS variable cost per ton. For example, in Rebuttal Exhibit II-A-8, WFA/Basin developed an unlinked rebuttal URCS variable cost of $1.46 per ton for 4Q04 movements from Dry Fork to LRS. The linked variable cost equals $1.45 per ton ($1.46 x 0.9934).

The ICC devised the linking factor in 1985. At that time, the ICC adopted URCS, in lieu of Rail Form A, as the ICC's preferred general purpose costing system.[6] The ICC was concerned that the switch from Rail Form A to URCS could impact outcomes in ICC cases.[7] The ICC decided to avoid such results by making the conversion process outcome neutral. To accomplish its objective, the ICC calculated total variable costs for all Class I railroads over a 5 year period (1983-1987) using Rail Form A and URCS. The URCS costs totaled $108.4 billion and the Rail Form A costs totaled $107.7

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[5] Id.

[6] See Ex Parte No. 431 (Sub-No. 1), Adoption of the Uniform Railroad Costing System for All Regulatory Purposes, 5 I.C.C.2d 894 (1989) ("Adoption of URCS").

[7] See Adoption of URCS at 899 n.15.

billion. The ICC proceeded to adopt a linking factor of 0.9934 ($108.4 billion ÷ $107.7 billion) so that parties in ICC (and now STB) proceedings could present linked URCS costs for jurisdictional threshold calculations.[8] The ICC, and the STB, have used a linking factor in calculating variable costs in all maximum rate cases since 1985.

On Reply, BNSF argues that the URCS linking factor "is no longer an accurate bridge between the RFA costing system and URCS."[9] BNSF relies entirely on asserted changes in the rail industry's capital costs since the mid-1980's in support of its "accuracy"claims. BNSF's accuracy proof is no proof at all. The cost of capital is incorporated in Rail Form A and URCS. Rail Form A used an embedded cost of capital and URCS, since its adoption in 1985, has used a current cost of capital. It is rank speculation to suggest that the change in the level of one component cost among many in URCS and Rail Form A would change the linking factor.

Nor is BNSF's proof relevant. The ICC held in 1985 that the linking factor would "be used as the bridge adjustment mechanism to be applied against URCS costs until the structure of the [URCS] undergoes significant subsequent modification in the future."[10] The URCS methodology to calculate capital costs has not undergone

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[8] See Adoption of URCS at 923-924.

[9] See BNSF Reply Narr. at II-4.

[10] See Adoption of URCS at 892.

"significant modification" since 1985. Accordingly, there is no basis to modify the 0.9934 URCS linking factor.

b. Traffic and Operating Characteristics – Overview

Following the submission of opening evidence, WFA/Basin and BNSF participated in a Board-supervised technical conference process. As a result of this process, WFA/Basin and BNSF agreed to the values of eighteen individual traffic and operating ("T&O") statistics for each of the five O/D pairs costed in 4Q04.[11] WFA/Basin have incorporated these agreed upon T&O statistics into their Reply and Rebuttal variable cost calculations.

Rebuttal Table III-A-3 below sets forth the agreed-upon T&O characteristics for a representative 4Q04 movement: Dry Fork to LRS.

[11] See the parties' joint letter to the STB dated May 13, 2005, a copy of which is included in WFA/Basin Reply electronic workpaper "May 13 ltr._001.pdf."

Rebuttal Table II-A-3 Agreed Upon T&O Parameters Dry Fork to LRS 4Q04	
Item	**Parameter**
1. Lading Weight (Tons)	121.5
2. Car Weight (Tons)	21.7
3. Cars Per Train	136
4. Loaded Miles	186.0
5. Empty Miles	186.0
6. Round Trip Miles	372.0
7. Origin-Loop Miles-Loaded	1.47
8. Origin Loop Miles-Empty	1.98
9. Destination Loop Miles-Loaded	2.58
10. Destination Loop Miles-Empty	2.91
11. Round Trip Miles	380.94
12. Locomotive Units Per Train	4.0
13. Locomotive Cycle Hours	51.56
14. Freight Car Cycle Hours	N/A
15. Sw-Rd. Loco, Yd (SEM's/Car)	0.0
16. Gross Ton Miles/Car	30,671
17. Train-Miles/Car	2.80
18. Locomotive Unit-Miles Per Car	10.94

The parties were unable to reach agreement on the value of two T&O movement statistics: switching engine minutes ("SEM") per car for switching by yard locomotives on yard track and SEM's per car for switching by road locomotives on non-yard track. Rebuttal Table III-A-4 below sets forth the parties' differing SEM calculations.

Rebuttal Table II-A-4 BNSF and WFA/Basin Reply SEM Calculations			
Item (1)	**BNSF** (2)	**WFA/Basin** (3)	**Diff.** (Col. 2 - Col. 3)
(1) Sw-Yd/Loco (SEM's/Car)	{ }	0.00	{ }
(2) Sw-Road Loco Non Yd (SEM's/Car)	{ }	0.044	{ }

Each disputed item is discussed below.

c. Traffic and Operating Statistics – Detail

i. Switching – Yard Locomotives (SEMs/Car)

BNSF's opening and reply evidence includes { } minutes per car for switching by yard locomotives.[12] The { } minute calculation is not the product of any special study of yard switching on LRS trains. Instead, it reflects BNSF's estimate of a system-average switching minute computation for this service.[13]

BNSF proceeds to apply these switch minutes to calculate a system-average yard switching cost of { } per car.[14] This switching cost constitutes a significant percentage of BNSF's total variable cost calculations for the LRS movement. For

[12] See BNSF Op. electronic workpaper "BNSF MOBA OPEN PRG.123," tab "Opr _ stats," line 63.

[13] See BNSF Op. electronic workpaper "BNSF-03-SWITCH SPLIT.123," tab "B," line 43, column L.

[14] See BNSF Reply electronic workpaper "BNSF MOBA REPLY PRG.123," tab "D," line 3.

example, yard switching approximates {   } of BNSF's total variable costs for the Dry Fork movement.[15] Even more significantly, BNSF's yard switching cost calculations constitute over 30% of the total dollar differential between WFA/Basin's and BNSF's 4Q04 LRS variable cost calculations.[16]

BNSF's yard switching calculations are remarkable because, as even BNSF concedes, BNSF's LRS trains do not run through any BNSF yards,[17] nor is there any recorded instance where BNSF ever used a yard locomotive to switch a car to or from an LRS train. Since no yard switching occurs on the LRS movements, WFA/Basin included no yard switch locomotive minutes, and no yard switching costs, in their Opening variable cost calculations.

Following WFA/Basin's submission of their opening evidence, the Board conducted a technical conference. At that conference, BNSF counsel acknowledged that BNSF yard locomotives do not switch cars to or from LRS trains. BNSF counsel stated that BNSF's yard switch minute calculations were intended to capture costs BNSF incurs when BNSF switches locomotive unit(s) into, or out of, the LRS trains at non-yard locations. After the technical conference, WFA/Basin determined that in the most recent

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[15] See BNSF Op. electronic workpaper "BNSF MOBA OPEN PRG.123," tab "D," column E, lines 10 and 28.

[16] See WFA/Basin Reply electronic workpaper "VC Difs Reply 4Q04 Dry Fork.123," tab "Summary," column F, line 76

[17] See BNSF Op. Narr. at II-2 ("[a]nother distinguishing feature of the Laramie River move is that the Laramie River trains do not pass through a major BNSF yard").

quarter for which BNSF provided responsive information in discovery (3Q04),[18] BNSF made non-yard power changes on LRS trains, on average, once per every { } one-way (loaded or empty) train round trips.[19]

In order to minimize switching cost disputes, WFA/Basin included in their Reply T&O statistics 55 minutes of road switching time for each time a road locomotive is switched into or out of the LRS trains at non-yard locations.[20] The 55 minutes per switching occurrence equates to 5.9 minutes per train or 0.044 minutes per car.[21]

On Reply, BNSF concedes, as it did during the technical conference, "that Laramie River trains do not pass through a yard" but paradoxically argues "[t]here is clearly yard switching" because locomotives "are switched out of Laramie River trains en route and taken to a yard for FRA inspections, servicing and repair as needed."[22] WFA/

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[18] BNSF produced no responsive 4Q04 records.

[19] See WFA/Basin Reply electronic workpaper "3Q04 LOCO CHANGE OUT.XLS," tab "Consist Summary," column G, line 46.

[20] WFA/Basin emphasize that they add this time to provide the Board with an alternative that addresses BNSF's stated concerns. The 55 minute calculation is taken from the Board's Xcel I decision. In Xcel I, the Board ruled that 55 minutes should be allowed for, inter alia, "reconfiguring the locomotive consist to move the distributed power unit to the head of the train for the return trip to the PRB." Id. at 129. In Xcel I, reconfiguration took place every round trip. In the instant proceeding, DP power reconfiguration does not take place, but locomotives are changed out every { } train loaded or empty trips on average.

[21] See WFA/Basin Reply electronic workpaper "VC WFA 2004 Reply.123," tab "OPR_Stats," columns B through I, line 57.

[22] BNSF Reply Narr. at II-9.

Basin note that there is no documented evidence of record supporting BNSF's claim that the removed locomotives go directly to BNSF yards. The record just shows when and where the locomotives are taken off the trains. They could go anywhere, and most likely are added to other trains. Also, unlike most BNSF movements, locomotives on LRS trains are routinely serviced at LRS – not in BNSF yards.

BNSF is attempting to fit a square peg into a round hole. Yard switching by yard locomotives is just that – switching that takes place in rail yards by yard locomotives. There is no yard switching by yard locomotives on LRS trains because these trains do not enter yards. However, BNSF does occasionally remove some power from the LRS trains at non-yard locations. WFA/Basin conservatively attribute some road switching time for this service – 0.044 minutes per car. This road switching figure, not BNSF's inflated "system-average" yard switch figure, is the best record evidence of BNSF's non-yard locomotive switching time.

ii. Switching Road Locomotives Non-Yard (SEMs/Car)

On opening BNSF included { } minutes per car for switching by road locomotives at non-yard locations.[23] At the Board's technical conference, BNSF counsel stated these minutes were intended to reflect the time it takes to switch out bad order cars at LRS. The { } minute calculation is not the product of any special study of bad

[23] See BNSF Op. electronic workpaper "BNSF MOBA OPEN PRG.123," tab "Opr_stats," line 67.

order car switching at the LRS plant. Instead, it reflects BNSF's estimate of a system-average switching minute computation for this service.[24]

BNSF's use of a system-average road switch minute calculation is inappropriate for two reasons. First, as WFA/Basin explained in their opening evidence, all car switching at LRS is performed by a BNSF contractor – Quality Rail Services, LLC ("QRS").[25] Since BNSF is not performing this service, it is improper to utilize a BNSF system-average switch minute calculation – which reflects BNSF's average switching time – for a service which BNSF does not perform. Secondly, more accurate movement-specific cost data exists. BNSF pays QRS bills for the switching services QRS performs for BNSF at LRS. WFA/Basin included BNSF's payments to QRS in its opening variable cost calculations.[26] The payments by BNSF to QRS for unloading/switching operations accurately capture the costs BNSF actually incurs for bad order car switching at LRS.

At the Board's technical conference, counsel for BNSF observed that QRS uses BNSF's locomotives to provide switching service at LRS. Counsel opined that the fee QRS charges to BNSF (and BNSF pays) does not include BNSF's locomotive capital costs and BNSF's locomotive fuel costs. Under this theory, BNSF is supplying free power to a contractor – a highly unlikely scenario. However, even if BNSF counsel's

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[24] See BNSF Op. electronic workpaper "BNSF-03-SWITCH SPLIT.123," tab "B," line 42, column L.

[25] See WFA/Basin Op. Narr. at II-A-4.

[26] Id. at II-A-29.

speculations are true, WFA/Basin's variable costs include, in addition to the QRS payment, the costs BNSF counsel claims are omitted. WFA/Basin's calculation of BNSF's locomotive capital costs include the costs BNSF incurs while the locomotives are being used by QRS,[27] and WFA/Basin's calculation of BNSF's fuel costs includes the cost of fuel consumed while the BNSF locomotives are being used by QRS.[28]

On Reply, BNSF does not address switching at LRS, although BNSF continues to include SEMs per car for road switching[29] -- apparently at LRS. On Rebuttal, WFA/Basin include no BNSF switching minutes for QRS switching at LRS. The QRS switching costs are captured in the payments BNSF makes to QRS – payments WFA/Basin do include in their variable cost calculations.[30]

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[27] See WFA/Basin Op. electronic workpaper "VC WFA 2004 Open.123" tab "P," line 64, for any mine.

[28] BNSF counsel also argued at the technical conference that WFA/Basin's fuel cost calculations capture only the fuel cost BNSF incurs when QRS provides line-haul, as opposed to switching, service at LRS, and thus understates BNSF's fuel costs. This is not correct. WFA/Basin's use of a system-average fuel consumption rate most likely overstates BNSF's locomotive fuel costs while QRS is using the BNSF locomotives because QRS moves WFA/Basin trains, and switches cars, at far lower than BNSF system-average train speeds and throttle positions. As a result, the BNSF locomotives consume far less fuel than the system-average amounts contained in WFA/Basin's calculations. See, e.g., TMPA II at 12 (locomotive fuel consumption is correlated to locomotive throttle position).

[29] See BNSF Reply electronic workpaper "VC WFA 2004 Reply.123," tab "OPR_STATS," line 57.

[30] See WFA/Basin Op. Narr. at II-A-29.

d. Cost Calculations

WFA/Basin present their Rebuttal variable cost calculations using an illustrative 4Q04 O/D pair: Dry Fork to LRS. Rebuttal Table II-A-5 below shows, by cost item, WFA/Basin's Reply and Rebuttal variable cost calculations, and BNSF's Reply variable cost calculations, for the Dry Fork to LRS movement.

Rebuttal Table II-A-5
Variable Cost Per Ton
Dry Fork to LRS
(4Q04)

Service Category (1)	**WFA/Basin Reply Cost** (2)	**BNSF Reply Cost** (3)	**WFA/Basin Rebuttal Cost** (4)	**Difference Col. 3 - Col. 2** (5)
1. Carload O/T Clerical Expense	{ }	{ }	{ }	{ }
2. Carload Handling – Other Expense	{ }	{ }	{ }	{ }
3. Switching Expense – Yard Locomotives (SEM)	{ }	{ }	{ }	{ }
4. Switching Expense – Road Locomotives (Non-Yard)	{ }	{ }	{ }	{ }
5. Switching Expense – Road Locomotives (Yard)	{ }	{ }	{ }	{ }
6. Gross Ton-Mile Expense (GTM)/Joint Facility Payment	{ }	{ }	{ }	{ }
7. Loop Track Expense – Origin & Destination	{ }	{ }	{ }	{ }
8. Train-Mile Expense – Other than Crew	{ }	{ }	{ }	{ }
9. Train-Mile Expense – T&E Crew	{ }	{ }	{ }	{ }
10A. Helper Service Expense – Other than Crew	{ }	{ }	{ }	{ }
10B. Helper Service Expense – T&E Crew	{ }	{ }	{ }	{ }
11. Locomotive Unit-Mile Expense	{ }	{ }	{ }	{ }
12. Locomotive Ownership Costs	{ }	{ }	{ }	{ }
13. User Responsibility – Car Repair Expense	{ }	{ }	{ }	{ }
14. Car Operating Expense – Substitute cars	{ }	{ }	{ }	{ }
15. Car Ownership Expense – Substitute cars	{ }	{ }	{ }	{ }
16. Caboose and EOTD Ownership Expense – included in line 8	{ }	{ }	{ }	{ }
17. Loss and Damage Expense	{ }	{ }	{ }	{ }
18A. Third Party Loading Charges	{ }	{ }	{ }	{ }
18B. Third Party Unloading Charges	{ }	{ }	{ }	{ }
19. Total Variable Cost Per Car	{ }	{ }	{ }	{ }
20. Tons Per Car	{ }	{ }	{ }	{ }
21. Variable Cost Per Ton	{ }	{ }	{ }	{ }
22. WFA – URCS Linking Factor	{ }	{ }	{ }	{ }
23. Linked Variable Cost Per Ton	1.42	2.04	1.45	0.59

i. Carload Originated or Terminated – Clerical Expense

The difference in the parties' clerical costs { } is attributable to their differing calculations of the BNSF 2004 URCS. As discussed above, WFA/Basin correctly calculated the BNSF 2004 URCS.

ii. Carload Handling – Other Expenses

On Reply, BNSF calculates carload handling expenses at { } per car. This equals WFA/Basin's Rebuttal calculation.

iii. Switching Expense – Yard Locomotive

BNSF includes a cost of { } per car for yard switching. As discussed above, BNSF does not use yard locomotives to switch cars on LRS trains. WFA/Basin continue to include no costs for yard switching since BNSF does not incur these cost in providing LRS service.

iv. Switching Expense – Road Locomotives (Non-Yard)

BNSF includes a cost of { } per car for non-yard bad order switching by BNSF road locomotives at LRS. As discussed above, BNSF does not perform bad order switching at LRS – a contractor, QRS, performs this service, and is compensated by BNSF for it. WFA/Basin properly include BNSF's payment to QRS in their third party unloading costs (item xviii, below).

On Rebuttal, WFA/Basin also include a cost of { } per car for BNSF's road switching of its locomotive consists. See p. II-A-13, above. The cost is slightly lower than WFA/Basin's Reply cost ($ { } per car). On Rebuttal WFA/Basin corrected an error they made in their prior cost calculations.[31]

v. Switching Expense – Road Locomotive (Yard)

BNSF road locomotives perform no switching of LRS cars at BNSF yards. The parties agree that no costs should be included for this item.

vi. Gross Ton-Mile Expenses

Rebuttal Table II-A-6 below compares the parties' opening evidence calculations of Gross Ton Mile ("GTM") expense (per car) for BNSF's Dry Fork to LRS movements in 4Q04.

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[31] On Reply, the cost model contained a cell (the operating expense portion of line 4gg-Unit Cost Overhead Adjustment for Loco Repairs and Fuel Adjustments at page 3 of 15 of each of Rebuttal Exhibits II-A-8 through II-A-12) with a faulty equation. As a result, that cell was not pulling its inputs from the proper location, and it calculated costs that had already been accounted for in departmental overheads.

Rebuttal Table II-A-6 Comparison of WFA/Basin Rebuttal and BNSF Reply Evidence Variable GTM Expenses Per Car Dry Fork to LRS (4Q04)			
Item (1)	**BNSF Cost ($/car)** (2)	**WFA/Basin Cost ($/car)** (3)	**Difference (Col. 2 - Col. 3) ($/car)** (4)
Maintenance-of-Way/Joint Facility Expenses	{ }	{ }	{ }
Return on Road Property Invest.	{ }	{ }	{ }
Road Property Depreciation	{ }	{ }	{ }
Locomotive Fuel Expense	{ }	{ }	{ }
Locomotive Maintenance Exp.	{ }	{ }	{ }
Other GTM Expense	{ }	{ }	{ }
TOTAL	{ }	{ }	{ }

(a) <u>Maintenance-of-Way/Joint Facilities</u>.

On Opening, WFA/Basin developed line-specific maintenance-of-way costs for the BNSF trackage used by LRS trains between Caballo Jct. and Shawnee Jct., WY (the BNSF/UP "Joint Line") and developed BNSF system-average maintenance-of-way costs for the other BNSF track segments traversed by LRS trains.[32]

On Reply, BNSF argues that the Board should reject WFA/Basin's movement specific maintenance-of-way evidence because: (i) WFA/Basin have used the wrong URCS variability factor; (ii) WFA/Basin did not develop a movement-specific

[32] <u>See</u> WFA/Basin Op. Narr. at II-A-14 to 17.

variability factor, and (iii) WFA/Basin do not use the correct years' data.[33] BNSF's assertions are wrong.

(i) Proper URCS Variability Factor

WFA/Basin used the URCS variability factor of 63.1 percent for joint facilities expenses to calculate line specific maintenance-of-way expenses.[34] The joint facility here in question – the Joint Line – is jointly owned by BNSF and UP.[35] BNSF records expenses it incurs to maintain the Joint Line as joint facility maintenance-of-way expenses (or debits) in its Form R-1.[36] These R-1 expenses are included in the URCS joint facility maintenance-of-way accounts. The proper URCS variability factor to apply is 63.1%.[37] WFA/Basin's further note that their development of the variability factor is consistent with the methodology used in Xcel (59.8 percent based on 2001 data)[38] except

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[33] See BNSF Reply Narr. at II-11 to 13

[34] See WFA/Basin Op. Exhibit II-A-4.

[35] The joint facility agreement for the Joint Line was provided by BNSF in discovery and is reproduced in WFA/Basin Rebuttal Workpapers, pp. 38-69.

[36] The Joint Line maintenance cost was treated as a joint facility expense in Xcel I. See WFA/Basin Rebuttal Workpapers, pp. 35-37.

[37] See TMPA I at 56 n. 93 (noting that both TMPA and BNSF "use actual joint-facility payments in developing MOW expense"). WFA/Basin point out that the variability factor for BNSF non-joint facility maintenance-of-way costs is only slightly higher (67.7%). See WFA/Basin Rebuttal electronic workpaper "BNSF MW AND JF VARIABILITY EXPENSES.DOC."

[38] See Xcel I at 144.

that the actual variability was slightly lower in that case due to differences in joint facility expenses and URCS costs for 2001 the versus 2004 URCS used here.

(ii) Movement-Specific Variability Factor

Next, BNSF asks the Board to reject WFA/Basin's movement-specific maintenance-of-way evidence because WFA/Basin did not develop a "route-specific" URCS variability factor.[39]

BNSF's principal argument here is that variability increases with traffic density. According to BNSF, it is improper to use a "system-average" URCS variability factor for BNSF maintenance-of-way because the LRS traffic moves over lines with higher than "system-average" densities. BNSF makes this argument with regard to several of the WFA/Basin movement-specific cost calculations, including road property.[40] WFA/Basin address BNSF's "variability" claims in detail in Rebuttal Exhibit II-A-1.

The Board "has routinely accepted a wide variety of movement-specific adjustments without any adjustment of the system-average variability factors of URCS."[41] As shown in Rebuttal Exhibit II-A-1, BNSF offers no credible evidence why the Board should depart from this routine practice in this case.

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[39] See BNSF Reply Narr. at II-12.

[40] See BNSF Reply Exhibit II-A-4 at p. 21.

[41] Xcel I at 136.

(iii) <u>Data Set</u>

Finally, BNSF argues the Board should reject WFA/Basin's movement-specific maintenance-of-way calculation because WFA/Basin used only 2003 joint facility maintenance-of-way data, not five years worth of data.[42]

URCS calculates joint facility maintenance costs using one year's worth of data – not five.[43] Consistent with the URCS methodology, the Board accepted the use of one year of data in Xcel I.[44] Accordingly, WFA/Basin followed URCS procedures in using single year data. Also, consistent with Board costing procedures, WFA/Basin utilized the calendar 2003 maintenance-of-way expense data – the most recent full year data BNSF provided in discovery.[45]

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[42] See BNSF Reply Narr. at II-13.

[43] See WFA/Basin Rebuttal electronic workpaper "BNSF049OR.zip," Worktables A2 and D1.

[44] The Xcel I decision does not specifically mention the one-year data set but WFA/Basin's witness, Mr. Plaistow, sponsored the complainant's variable cost evidence in that case. He is, therefore, aware that the parties used one year of data in their calculations. Moreover, URCS specifies the "Annualization Period" which is the number of years over which URCS normalizes the costs for each account. In particular, Worktable D1, Part 1, Line 129 is Jt Facilities Rents-DR and Line 131 is Jt Facilities Rents-CR. The annualization column (column 8) specifies one year for both lines. The cell references are D1L129C8 and D1L131C8.

[45] See WFA/Basin Op. Workpapers Vol. 1, pp. 00674-00699, Op. electronic workpaper "2004 JT_variable joint facility WFA.xls," and the electronic files in Op. electronic workpaper folder "WFA Open\II-A\MOW & JT Fac\invoices."

* * *

In its opening and reply evidence, BNSF relies exclusively on BNSF system-average maintenance-of-way costs. WFA/Basin properly substitutes more accurate line-specific maintenance-of-way costs where these costs are available. Accordingly, the Board should accept WFA/Basin's maintenance-of-way calculations as the best evidence of record.

(b) Return on Investment and <u>Depreciation of Road Property</u>.

On Opening, BNSF developed system-average road property costs.[46] WFA/Basin developed more accurate line-specific road property costs utilizing the same procedures the STB has routinely accepted in prior cases.[47] Application of the procedure produces road return and road depreciation costs that are approximately 25% less than BNSF's system-average costs.

On Reply, BNSF argues that WFA/Basin's movement-specific evidence must be rejected because WFA/Basin have not met their burden of proof to demonstrate that their movement-specific costs produce results superior to URCS system-average

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[46] <u>See</u> BNSF Op. Narr. at II-12, (1) Gross Ton-Mile Costs.

[47] <u>See</u> WFA/Basin Op. Narr. at II-A-17. The slight differences between the procedure used herein and the procedures used in prior cases are attributable to the differences in the data provided by BNSF in each proceeding. In the instant proceeding (and for the first time), BNSF provided all the data required to calculate (at the net investment level) each reconciliation component required for reconciliation at the system level.

costs. In support of this contention, BNSF repeats the same arguments the Board has considered – and repeatedly rejected – in prior cases. These arguments focus on asserted deficiencies in BNSF's internal road property records. WFA/Basin respond to BNSF's arguments below and in Rebuttal Exhibit II-A-1.

(i) Burden of Proof

WFA/Basin calculated movement-specific BNSF road property costs using a multi-step procedure.[48] This procedure utilizes line-specific road investment, and depreciation, data BNSF maintains in the ordinary course of business to develop line-specific adjustments to URCS system-average road property costs.[49]

The STB, and its predecessor the ICC, have approved the development of BNSF line-specific road property costs in every PRB coal rate case involving BNSF since 1986. These cases include San Antonio, WTU, TMPA, and Xcel.[50] In each of these cases, the complainant shipper developed line-specific BNSF road property costs using internal BNSF records, and multi-step procedures, similar to, or identical to, those WFA/Basin employed in this case.

Each of these cases also produced similar results – i.e., line-specific road property costs substantially less than BNSF's system-average costs. These results arise

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[48] See WFA/Basin Rebuttal Exhibit II-A-1.

[49] Id.

[50] See WFA/Basin Rebuttal Workpapers, pp. 85-109.

because the variable road costs BNSF incurs on its coal lines are spread out over substantial traffic volumes. The lower than system-average results "reflect economies associated with traffic traveling over very high-density lines."[51]

Where the Board (and the ICC) have consistently accepted and applied a costing procedure, the burden shifts to the party opposing that procedure to demonstrate that the procedure should no longer be followed. As stated by the Board:

> the parties to SAC cases are cautioned not to attempt to relitigate issues that have been resolved in prior cases. Unless new evidence or different arguments are presented, we will adhere to precedent established in prior cases.[52]

As demonstrated below and in Rebuttal Exhibit II-A-1, BNSF presents no "new evidence or different arguments" to support its request that the Board abandon 19+ years of consistent precedent and default to system-average road property costs in this case.

(ii) BNSF Road Property Arguments

In TMPA and Xcel, BNSF objected to the complainant shipper's calculations of line-specific road property costs. In these cases, BNSF argued that its internal records, including its "Fixed Asset Data Base" ("FADB") – a data base that "contains investment data for individual segments of the railroad" – could not properly be

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[51] Xcel I at 136.

[52] Ex Parte No. 347 (Sub-No. 3), General Procedures for Presenting Evidence in Stand-Alone Cost Rate Cases, STB served March 12, 2001 ("General Procedures") at 6

used to calculate movement-specific road property costs.[53] Alternatively, BNSF argued that even if the FADB data would be used, the complainant shipper's multiple-step methodology used to develop the URCS adjustment was flawed for various reasons (including using the URCS variability ratios for road investment and road return).[54]

In TMPA and Xcel, the Board considered all of BNSF's arguments (i.e., flawed data, flawed methodology, wrong variability factors, etc.) and rejected them. The Board found BNSF's FADB data base can be used to develop movement-specific road costs, the methodologies the complainant shippers used to develop URCS adjustments were appropriate, and the complainant shippers properly relied upon URCS variability factors.[55]

In the instant case, BNSF – by its own admission – raises exactly the same arguments it raised – and lost – in TMPA and Xcel concerning WFA/Basin's development of line-specific road property costs.[56] BNSF claims that the Board did not "fairly" address BNSF's contentions in the prior cases.[57] In fact, BNSF simply wants to

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[53] See BNSF Reply Exhibit II.A-4

[54] See BNSF Reply Narr. at II-14.

[55] See TMPA I at 56-57; Xcel I at 136.

[56] See BNSF Reply Narr. at II-13.

[57] See BNSF Reply Exhibit II.A-4, p. 3.

continue to relitigate settled issues over and over again, making the same arguments over and over again. The Board should not sanction BNSF's actions.[58]

In order for the Board to have a complete record in this case, WFA/Basin append in Rebuttal Exhibit II-A-1 a detailed response to BNSF's specific criticisms of WFA/Basin's calculation of line-specific road return and road depreciation costs. However, there is no need for the Board to address these materials if it adheres to its "no relitigation of settled issues" rule.

(iii) <u>BNSF's Recordkeeping</u>

In <u>San Antonio</u>, and again in <u>WTU</u>, BNSF relied on "FADB data ... to propose adjustments to URCS system-average costs...."[59] The results are significant. For example, in <u>WTU</u>, the Board accepted BNSF's movement-specific road property calculations. BNSF's own calculations showed that its roadway return costs were 55% less then BNSF's system-average roadway return costs and its roadway depreciation costs were 25% less than BNSF's system-average roadway depreciation costs.[60]

BNSF developed its road property costs in <u>WTU</u> using its internal FADB data; used procedures similar to those WFA/Basin employ here to develop URCS

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[58] <u>See</u> <u>General Procedures</u> at 6.

[59] <u>See</u> <u>TMPA I</u> at 57.

[60] <u>See</u> p. 15 of Exhibit II-A-25 of the complainant's Reply Evidence (Public Version) in <u>Otter Tail</u>, a copy of which is included in WFA/Basin Rebuttal electronic workpaper "BNSF's WTU Road Property Calculation.pdf."

adjustment factors; and applied the 50% URCS variability factors for road return and road depreciation.[61] BNSF now claims that the same data bases and procedures it used in WTU are no longer any good, and, as a result, the Board must default to system-average costs.

BNSF is the collector of the records WFA/Basin needs to calculate movement-specific road property costs. The ICC, and the Board, have found in case after case that in PRB coal movements, BNSF's movement-specific road property costs are substantially less than system-average. BNSF could – if it wanted to – fill what it asserts are gaps in its current movement-specific road property records. However, given the answers this data has produced in rate cases, BNSF has no incentive to do so – and every incentive to try to impeach the records it does keep.

The Board should not sanction a party's effort to avoid results it does not like by manipulating its internal recordkeeping processes. Where the Board properly suspects that a party (i.e., BNSF) may be engaging in such practices, the Board should make every effort to permit the shipper to utilize data that is available to reach results consistent with past case results.

WFA/Basin's movement-specific road property analysis reduces BNSF's system-average costs by 25%. This result is consistent with the overall results in past cases – i.e., movement-specific road property costs less than system-average costs.

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[61] Id.

WFA/Basin's movement-specific road property costs – not BNSF's inflated system-average costs – are the best record evidence.

(c) **Locomotive Fuel Expense**

At the outset of this case, WFA/Basin asked BNSF whether it had prepared any movement-specific fuel consumption studies on the LRS trains.[62] BNSF responded that it had not.[63] However, shortly before the parties' opening evidence was due, BNSF counsel informed WFA/Basin counsel that BNSF counsel had just "learned" that BNSF had prepared a special fuel consumption "event recorder" study on the LRS trains.[64] BNSF proceeded to provide the special study results to WFA/Basin.

Upon receipt of BNSF's belated fuel study production, WFA/Basin undertook an expedited review of BNSF's production. WFA/Basin found this production woefully inadequate since BNSF did not provide the underlying event recorder study data, or the computer programs used to manipulate that data. And, to the extent WFA/Basin could analyze the study results, they appear to be fatally flawed (e.g., BNSF

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[62] See WFA/Basin's Request For Production ("RFP") No. 36 (served Oct. 20, 2004), a copy of which is included in WFA/Basin Reply electronic workpaper "DR 36_001.pdf."

[63] See BNSF's Responses to WFA/Basin's RFP No. 36 (served Nov. 19, 2004), a copy of which is included in WFA/Basin Reply electronic workpaper "DR 36_001.pdf."

[64] See BNSF counsel's letter to WFA/Basin counsel dated March 14, 2005, a copy of which was provided in WFA/Basin Reply electronic workpaper "March 14 ltr. 001. pdf."

collected consumption data only from AC4400 locomotives – locomotives that comprise only { }% of the locomotive unit hours used to transport WFA/Basin trains).[65]

Accordingly, in the absence of any better evidence, WFA/Basin's opening evidence calculated variable locomotive fuel costs for the LRS trains using BNSF system-average costs.[66] WFA/Basin's system-average calculations included use of system-average locomotive fuel consumption rates and use of system-average fuel prices (indexed to 4Q04 price levels).

On Opening, BNSF relied upon its special event recorder fuel consumption study to calculate LRS fuel consumption rates. BNSF also relied upon a second special study to calculate LRS train fuel prices. Both BNSF's fuel consumption rate, and its fuel prices, substantially exceed BNSF's system-averages.[67] WFA/Basin demonstrated in their Reply filing that BNSF's special event recorder fuel consumption study was fatally flawed because BNSF did not produce the underlying event recorder study data and the computer programs used to manipulate that data.[68] Instead, BNSF produced "Black Box" results. BNSF's results underscore the numerous study errors (e.g., no consumption data for SD70 MACs). See WFA/Basin Reply Exhibit II-A-1.

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[65] See WFA/Basin Reply Exhibit II-A-1, pp. 6-8.

[66] See WFA/Basin Op. Narr. at II-A-19 and 23.

[67] See WFA/Basin Reply Exhibit II-A-1, p. 13 and BNSF Reply Narr. at II-16.

[68] See WFA/Basin Reply Exhiibt II-A-1, pp. 1-12.

On Reply, BNSF endeavors to bolster its flawed event recorder study with a second special study of "fuel meter tickets."[69] BNSF also tries to cooper-up obvious problems with the event recorder study (e.g., sample size and result inconsistencies).[70] WFA/Basin address BNSF's reply contentions in detail in Rebuttal Exhibit II-A-2. As shown in Rebuttal Exhibit II-A-2, BNSF's "fuel meter ticket" special study is as flawed as BNSF's event recorder study.[71] And, as is also shown in Rebuttal Exhibit II-A-2, BNSF's reply evidence does not supply the missing study event recorder data or the missing computer programs used to analyze that data, nor does it correct the many flawed event recorder data collection procedures.[72]

(d) Locomotive Maintenance Expense

Most locomotives used in LRS service are SD70MACs. On Opening, WFA/Basin developed movement-specific LRS service locomotive maintenance costs.[73] WFA/Basin were able to make these adjustments because in discovery BNSF produced SD70MAC-maintenance data, including SD70MAC maintenance contracts BNSF has entered into with suppliers and the maintenance and overhaul payments BNSF has made

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[69] See BNSF Reply Narr. at II-18 to 19.

[70] See BNSF Reply Narr. at II-19 n. 21

[71] See WFA/Basin Rebuttal Exhibit II-A-2, pp. 2-10.

[72] Id. pp. 10-11.

[73] See WFA/Basin Op. Exhibit II-A-7.

under these contracts, as well as SD70MAC operating statistics needed to develop unit costs. WFA/Basin utilized this material to develop adjustments to URCS system average locomotive maintenance costs.[74]

The Board recently rejected a similar movement-specific locomotive maintenance adjustment on grounds that the involved maintenance agreements do not cover "non-routine maintenance costs."[75] In response to the Board's concerns, WFA/Basin adjusted only those URCS accounts corresponding to accounts covered by the involved locomotive maintenance agreements. Repair costs not covered by these agreements (e.g., non-routine maintenance costs) are costed on a system-average basis.

On Reply, BNSF asserts that WFA/Basin's movement-specific maintenance cost study should be rejected because it fails to account for non-routine maintenance costs, fails to account for certain labor costs BNSF incurs, and fails to account for certain overhauling costs.[76] WFA/Basin address BNSF's maintenance cost argument in detail in Rebuttal Exhibit II-A-3. As discussed there, most of BNSF's criticisms of WFA/Basin's locomotive maintenance cost calculations are unsupported. However, on Rebuttal, WFA/Basin do revise their opening locomotive maintenance calculations to include certain inadvertently-omitted labor costs. Inclusion of these revised labor costs increases

[74] See WFA/Basin Op. Narr. at II-A-19 to 20.

[75] See Xcel I at 138.

[76] See BNSF Reply Narr. at II-20.

WFA/Basin's system-average locomotive maintenance adjustment ratio from 68.4% to 93.8%.

(e) Other GTM

WFA/Basin calculate other GTM costs on a system-average basis. The difference in the parties' other GTM costs are due to (1) BNSF's failure to follow Board policy calling for BNSF to adjust its URCS cost model to remove the $465 million special charge for asbestos claims as explained above, and (2) BNSF's inclusion in Other GTM costs of certain costs that WFA/Basin included in fuel and other overheads, including general and departmental locomotive repair overheads and fuel overheads.

vii. Loop Track Expense – Origin and Destination

On Opening, WFA/Basin developed origin and destination loop track variable costs following costing procedures routinely applied in STB maximum rate cases.[77] Because BNSF costed the loop track operations as if they were road train to industry switching operations – which they are not – BNSF's Opening cost presentation does not contain loop track expenses corresponding to those WFA/Basin developed. In their Reply and Rebuttal variable costs, WFA/Basin continue to present loop track expenses in the Board-approved format.

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[77] See, e.g., Xcel I at 139; TMPA I at 59; WPL I at 56.

viii. Train-Mile Expense – Other than Crew

WFA/Basin's Rebuttal calculation of train-mile other costs is { } per car higher than BNSF's Reply calculation due principally to WFA/Basin's calculation of movement-specific train inspection costs at LRS using the actual amounts BNSF pays QRS for its services.[78] On Rebuttal, WFA/Basin continue to utilize these more accurate movement-specific calculations, not BNSF's system-average calculations.[79]

BNSF objects to WFA/Basin's use of movement-specific train inspection costs on the grounds that WFA/Basin utilize URCS variability factors to develop movement-specific inspection costs.[80] BNSF opines, as it has elsewhere, that WFA/Basin should have utilized a "route-specific variability factor."[81] As WFA/Basin demonstrate in Rebuttal Exhibit II-A-1, BNSF offers no evidence, or credible theory, to support its variability claims. As a result, the Board should continue to utilize URCS variability factors to calculate train inspection costs.

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[78] See WFA/Basin Op. Narr. at II-A-21.

[79] See WFA/Basin Reply Narr. at II-A-14.

[80] See BNSF Reply Narr. at II-24.

[81] Id.

ix. Train-Mile Expense – Train and Engine Crew

On Reply, BNSF accepts WFA/Basin's train crew costs with "one adjustment" – BNSF excludes loading crew costs.[82] On Rebuttal, WFA/Basin include loading crew costs. BNSF incurs these costs and, consistent with Board precedent, they should be included on a movement-specific basis.

x. Helper Service Expense – LUM and Crew Expense

On Opening, WFA/Basin included no helper service costs because BNSF produced no records showing that it provides any helper service on the LRS trains.[83] BNSF also included no costs for helper service in its reply evidence.

xi. Locomotive Unit-Mile Expense

BNSF's Reply locomotive unit-mile costs exceed WFA/Basin's Rebuttal costs by { } per car. BNSF's costs are overstated because they include BNSF's overstated fuel costs, BNSF's overstated locomotive maintenance costs, and other overstated costs. On Rebuttal, WFA/Basin utilize the same procedures as they did in their opening evidence to calculate locomotive unit-mile expenses, except as otherwise noted herein.

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[82] See BNSF Reply Narr. at II-25.

[83] See WFA/Basin Op. Narr. at II-A-23.

xii. Locotive Ownership Costs

BNSF's Reply calculation of variable locomotive ownership costs differs by { } per car from WFA/Basin's Rebuttal calculation. The difference is principally attributable to the parties' use of different spare margins and different lease-rate calculation procedures.

(a) Spare Margin

On Opening, WFA/Basin calculated a locomotive spare margin of { }. As shown in Rebuttal Table II-A-7 below, WFA/Basin's calculation of the spare margin requirement is in line with roughly 25 years of ICC and STB decisions addressing the proper calculation of BNSF locomotive spare margin requirements in coal rate cases.

Rebuttal Table II-A-7 ICC/STB Spare Margin Findings		
Case	Year Decided	Accepted Spare Margin Factor
Flint Creek	1979	8%
Superior	1980	10%
San Antonio	1986	10%
OPPD	1986	10%
APL	1986	10%
WTU	1996	10%
TMPA	2003	5%

WFA/Basin's spare margin calculation is based on availability guarantees included in BNSF's locomotive maintenance agreements.[84] On Reply, BNSF argues that WFA/Basin misread, and misapplied, the equipment guarantees.[85] WFA/Basin address these BNSF arguments in Rebuttal Exhibit II-A-4. As shown therein, the BNSF criticisms are meritless.

In its opening and reply evidence, BNSF calculates a spare margin of { }%. As shown in Rebuttal Table II-A-8 below, this spare margin factor is consistent with spare margin factors BNSF has proposed,[86] and the ICC and STB routinely have rejected, in previous cases.

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[84] See WFA/Basin Op. Narr. at II-A-25 to 26.

[85] See BNSF Reply Narr. at II-27 to 29.

[86] See WFA/Basin Rebuttal Workpapers, pp. 133-134 and 143-148.

Rebuttal Table II-A-8 Spare Margin Factors BNSF Has proposed and the ICC/STB has Rejected		
Case	**Year Decided**	**BNSF Spare Margin Factor Proposed and Rejected**[1/]
Flint Creek	1979	30%
Superior	1980	30%
San Antonio	1986	30.27%
OPPD	1986	30%
APL	1986	30%
WTU	1996	31.22%
TMPA	2003	10%

[1/] See WFA/Basin Rebuttal Workpapers, pp. 133-134 and 143-148.

BNSF's proposed { }% spare factor is predicated upon a flawed special study. WFA/Basin demonstrated why the Board cannot accept BNSF's study in their Reply Exhibit II-A-2. Among the many flaws in BNSF's special study are the following:

- BNSF includes locomotive idle time in making its spare margin calculations.
- BNSF's study is based on studies of locomotive idle times incurred for trains passing through the Guernsey and Alliance yards – yards that the LRS trains do not use.
- BNSF has not supplied sufficient data to confirm the validity of its study results (under BNSF's mistaken methodology).
- BNSF misapplies its methodology producing inflated results.

On Reply, BNSF addresses one perceived flaw in WFA/Basin's opening evidence – the exclusion of idle time. BNSF opines that the Board should follow its Xcel ruling and include idle time in calculating the locomotive spare margin.[87] For the reasons stated in their Opening and Reply filings, WFA/Basin respectfully submit that the Board's Xcel ruling on this point was wrong.[88] Spare margin, by definition, does not include the time locomotives are unavailable for service. As the Board recognized in WTU, "increasing the spare margin for idle time is inappropriate" because "[i]f locomotives are idle, they are ready for service and no spares are needed."[89]

BNSF tries to distinguish WTU by arguing the Board was defining spare margin for SAC purposes only.[90] That's nonsense. In WTU, the Board was defining spare margin. The term means the same thing in the context of variable or SAC costs. The Board proceeded to set a spare margin of 10%, not the inflated 31.22% spare margin BNSF advocated.[91] Similarly, the STB's predecessor, the ICC, defined spare margin for

[87] See BNSF Reply Narr. at II-28.

[88] See WFA/Basin Op. Narr. at II-26 and Reply Narr. at II-A-15.

[89] WTU, 1 S.T.B. at 690.

[90] See BNSF Reply Narr. at II-28.

[91] WTU at 690.

variable cost purposes as "the number of diesel units a railroad keeps in reserve to cover diesel units that have power failures or require maintenance."[92]

(b) Lease Costs

WFA/Basin calculate BNSF locomotive lease costs using the actual lease payments BNSF made in 3Q04 for leased locomotives used in LRS service.[93] BNSF calculates locomotive lease payments using constructed life-of-lease average payments.[94] The Board has consistently approved WFA/Basin's approach, and consistently rejected BNSF's approach.[95] WFA/Basin address BNSF's detailed lease cost contentions in Rebuttal Exhibit II-A-3. WFA/Basin show in Rebuttal Exhibit II-A-3 that their approach continues to be the correct one.

xiii. User Responsibility – Car Repair Expense

On Reply, BNSF improperly includes a cost of {   } per car for shipper-owned car operating expenses. This cost is improper because, as WFA/Basin pointed out in their opening evidence, all freight car repairs in 4Q04 to WFA/Basin-owned cars were

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[92] See Georgia Power v. Southern Ry., ICC Docket No. 40581 (ICC served August 20, 1993) at 41 n. 11.

[93] See WFA/Basin Op. Narr. at II-A-24.

[94] See BNSF Reply Narr. at II-30.

[95] See, e.g., WPL I at 57-58; Xcel I at 142; and WFA/Basin Rebuttal Workpapers, pp. 159-162.

performed at LRS by QRS and then billed to WFA/Basin.[96] Therefore BNSF incurred no repair expense for WFA/Basin-owned rail cars.

On Reply, BNSF cites to a May 14, 2005 derailment where, BNSF claims, it incurred costs for repairing WFA/Basin-supplied railcars.[97] This derailment, of course, did not happen in 4Q04, so it has no bearing on the costs developed for BNSF 4Q04 movements, of LRS trains.

xiv. Car Operating Expense (Railroad-Owned Only)

WFA/Basin and BNSF include no costs for railroad car operating expenses in their opening and reply evidence. BNSF separately invoices, and WFA/Basin separately pay, a $40 per round trip fee for each BNSF-supplied car. This separate fee reimburses BNSF for its car operating and ownership expenses.[98]

xv. Car Ownership Expense (Railroad-Owned Only)

WFA/Basin and BNSF include { } railroad car ownership expenses in their opening and reply variable cost calculations.

xvi. Caboose & EOTD Ownership Expense

WFA/Basin and BNSF did not separately cost this item in their opening and reply evidence. Both included EOTD ownership costs on a system-average basis.

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[96] See WFA/Basin Op. Narr. at II-A-27.

[97] See BNSF Reply Narr. at II-31.

[98] See WFA/Basin Op. Narr. at II-A-27 to 28.

xvii. **Loss and Damage**

On Opening, BNSF included a system-average loss and damage cost of { }.[99] WFA/Basin included { } loss and damage costs in their opening evidence because from 2002 through 2004, BNSF paid { } loss and damage claims for coal moving in LRS trains.[100] WFA/Basin's approach reflects BNSF's actual expense (i.e., { }).

On Reply, BNSF claims it paid WFA/Basin ${ } for damages WFA/Basin incurred when BNSF derailed an LRS train on May 14, 2005. This loss did not occur in 4Q04 and therefore should not be included in the Board's 4Q04 cost calculations.

xviii. **Third Party Loading and Unloading Charges**

Consistent with past STB-approved costing procedures,[101] WFA/Basin included the monies BNSF actually paid to third-party loading crews at origin, and QRS at destination.[102] BNSF included no corresponding cost calculations in its opening evidence. WFA/Basin therefore continue to include these third-party charges in their Rebuttal cost calculations.

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[99] See BNSF Reply Exhibit II-A-1, p. 3.

[100] See WFA/Basin Op. Narr. at II-A-28.

[101] See, e.g., Xcel I at 145; TMPA I at 64.

[102] See WFA/Basin Op. Narr. at II-A-28 to 29.

xix. Indexing

On Reply, BNSF correctly indexes costs for a base year 2004 URCS – not the 2003 URCS it used on Opening. After making this correction, BNSF maintains that WFA/Basin incorrectly utilized a 2003 PPI index factor, not a 2004 factor, and that WFA/Basin did not properly index BNSF's fuel costs.[103] On Rebuttal, WFA/Basin substitute the 2004 PPI index factors. BNSF's contention that WFA/Basin have not properly indexed fuel costs is wrong.

BNSF asserts that WFA/Basin improperly indexed system-average fuel costs rather than the fuel costs from BNSF's fuel study. WFA/Basin explain above and in Reply Exhibit II-A-1 and Rebuttal Exhibit II-A-2 why the Board cannot rely on BNSF's fatally-flawed fuel study results. WFA/Basin's fuel costs and fuel index should be accepted as the best evidence of record.

2. Rates and Resulting R/VC Calculations

Rebuttal Table II-A-9 below summarizes WFA/Basin's Rebuttal variable costs per ton, and the resulting revenue-variable cost ratios, for 4Q04 movements:

[103] See BNSF Reply Narr. at II-32.

Rebuttal Table II-A-9 BNSF Rates, Variable Cost and R/VC on PRB Coal Traffic to LRS 4Q04				
Origin (1)	**Var. Cost Exh. II-A-__** (2)	**Rate (with (surcharge)[1] ($)** (3)	**Var. Cost ($)** (4)	**R/VC (%)** (5)
Dry Fork	8	$6.71	$1.45	463%
Eagle Butte	9	6.72	1.50	448
Cordero	10	6.48	1.31	495
Caballo Rojo	11	6.53	1.31	498
Jacobs Ranch	12	6.25	1.24	504

[1] Includes BNSF's fuel surcharge. See WFA/Basin Reply electronic workpaper "T&O WFA Rebuttal.123," tab "TO Detail."

The results of WFA/Basin's Rebuttal study of BNSF's variable cost of service for each of the five coal movements referenced above are detailed in Rebuttal Exhibits II-A-8 through II-A-12.

III-A Stand-Alone
Traffic Group

III. A. TRAFFIC GROUP

1. Stand-Alone Traffic

The LRR is designed to provide single-line origin-to-destination service from the PRB to LRS. The LRR also originates PRB coal deliveries for 36 other utility customers.[1] On these "cross-over" movements, the LRR transports the coal from PRB origin mines to various interchange points with the residual BNSF. The residual BNSF then transports the coal from the interchange points either to utility coal-fired plants or to interchange points with other carriers for movement beyond to utility coal-fired plants. All told, LRS-originated traffic moves to 75 power plant destinations.[2]

On reply, BNSF launches into a diatribe that accuses WFA/Basin of "gaming" the LRR traffic selection process.[3] BNSF's gaming rants are absurd in this case.

a. The LRR Traffic Group is Conservatively Configured

The Coal Rate Guidelines require a shipper to configure a SARR so that the SARR serves the origins and destination of the issue traffic.[4] The Coal Rate Guidelines

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[1] See WFA/Basin Op. Exhibit III-A-2.

[2] Id.

[3] See BNSF Reply Narr. at III.A-5 to 15.

[4] See Metropolitan Edison Co. v. Conrail, 5 I.C.C. 385, 420 (1989) ("we cannot permit a SAC model that does not use the actual origin and destination points of the issue traffic"). The destination refers to the destination of the issue traffic on the defendant carrier's line.

permit and encourage shippers to augment the issue traffic with other traffic. This augmentation is called "grouping." Grouping is essential for the SAC test to work. As the ICC explained in the Guidelines:

> The ability to group traffic of different shippers is essential to theory of contestability. It allows the captive shipper to identify areas where production economies define an efficient subsystem or alternative system whose traffic is divertible to a hypothetical competitor. Without grouping, SAC would not be a very useful test, since the captive shipper would be deprived of the benefits of any inherent production economies.

Id. at 544.

The Coal Rate Guidelines also give a shipper broad rights to select its SARR traffic group. See id. ("[w]e see no need for any restrictions on the traffic that may potentially be included in a stand-alone group"). Similarly, the Guidelines provide the shipper with "broad flexibility" in modeling the "least costly" SARR:

> The parties will have broad flexibility to develop the least costly, most efficient plant. The plant should be designed to minimize construction (or acquisition) and operating costs and/or maximize the carriage of profitable traffic. In selecting the route of a SAC railroad, for instance, an overriding factor may be the effort to lower costs by taking advantage of economies of density. Generally, a stand-alone railroad would attempt to fully utilize plant

> capacity, adding other profitable traffic in order
> to reduce the average cost of operation.

Id. at 543.

The ICC and the Board have repeatedly reaffirmed that shippers have broad discretion in configuring a SARR.[5] WFA/Basin have exercised these broad rights in a very conservative manner in this case.

The LRR, like all SARRs, is constructed to provide origin-to-destination service for the issue traffic. Here, WFA/Basin's issue traffic moves from the PRB to the LRS. The LRR route of movement mimics BNSF's current route of movement for the LRS traffic.[6] The LRR traffic group also contains non-LRS traffic. WFA/Basin's non-issue traffic group members consist solely of BNSF utility coal customers that currently, or will soon, utilize the BNSF lines the LRR replaces.[7] And, WFA/Basin route this traffic

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[5] See, e.g., WTU, 1 S.T.B. at 655 ("[t]o make an SAC presentation, a shipper designs a hypothetical new carrier (a stand-alone railroad, or SARR) that is specifically tailored to serve an optimum traffic group with the optimum physical plant (rail system) needed for that traffic"); WPL I at 12 n.20 ("[u]sing computer models to simulate the flow of traffic over the defendant's rail system, the complainant can select a traffic group and route system for the SARR that would have sufficient economies of density to maximize revenues while minimizing costs"); APL, 3 I.C.C.2d at 773 ("*SAC Traffic Base – Grouping.* Grouping refers to the inclusion of non-issue traffic in the traffic base that is hypothesized for the SAC system. Grouping is important in estimating SAC because the railroad industry is characterized by economies of density and scope.")

[6] See WFA/Basin Op. Narr. at III-B-1.

[7] Id. at III-A-4.

in the same fashion BNSF does today.[8] This is as simple, and conservative, as one can get in designing a SARR.

Significantly, the WFA/Basin traffic group contains no rerouted traffic – i.e. traffic that moves using different routings than those currently employed by BNSF. The WFA/Basin traffic group also includes no PRB customers for whom the UP now originates coal traffic. Excluding re-routed, and UP-originated, traffic significantly reduces the LRR traffic volumes – and most likely increases the resulting SAC rates.

WFA/Basin undertake a conservative approach to their traffic group selection because of their need to expedite resolution of this case. WFA/Basin's customers are paying exorbitant freight rates and need prompt rate relief. The Board's consideration of traffic re-route issues,[9] and reconsideration of its rulings on inclusion of non-defendant carrier traffic in a SARR traffic group,[10] would likely extend the case schedule ad infinitum.

In any case, WFA/Basin cannot credibly be accused of "gaming" the traffic selection for the LRR where, as here, WFA/Basin's LRR traffic group was so conservatively selected.

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[8] Id. at III-A-5.

[9] See Western Fuels Association, Inc. and Basin Electric Power Cooperative v. BNSF Ry., STB Docket No. 42088 (STB served March 14, 2005) at 2-3.

[10] See AEPCO (STB served Nov. 19, 2003) at 3-4.

b. Use of Cross-Over Traffic is Permitted and Encouraged

BNSF repeats the same tired arguments it has raised before, and the Board has consistently rejected, concerning the inclusion of SARR cross-over traffic – i.e., traffic that the SARR interchanges with the residual incumbent. According to BNSF, inclusion of cross-over traffic in a SARR is a "gaming" strategy.[11] However, as the ICC, and the Board have repeatedly held, inclusion of cross-over traffic is a perfectly permissible form of SARR traffic grouping.[12]

As the Board explained recently in Xcel I, "the Board has accepted extensive use of cross-over traffic in previous cases." Id. at 13. Inclusion of cross-over traffic permits the SARR "to take into account the economies of scale, scope and density that the defendant carrier enjoys over the routes replicated." Id. at 13-14. Indeed, if the Board did not permit cross-over traffic, the SAC standard would not work. In the absence of cross-over traffic, a shipper would have two choices: exclude the traffic or include the traffic but eliminate its cross-over status.[13] The Board has recognized that neither approach is consistent with basic SAC principles.[14]

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[11] See BNSF Reply Narr. at III.A-15.

[12] See Xcel I at 13-17; Xcel II at 7; Duke/NS I at 29; Nevada Power II, 10 I.C.C.2d at 265-67.

[13] Cross-over traffic is eliminated if the SARR is extended to reach the traffic destination, or interchange point, on the defendant carrier's lines.

[14] See Xcel I at 13-17.

If a shipper is forced to exclude cross-over traffic, the shipper is denied the scale, scope and density benefits of grouping guaranteed by the Guidelines.[15] Application of such a rule in the instant case would mean that the LRR would have only one shipper and only one movement – WFA/Basin's PRB-to-LRS traffic. Under this scenario, WFA/Basin would have to build a 188 mile SARR[16] from the PRB to LRS, financed solely by BNSF's LRS rates. Obviously, a 188 mile single-shipper SARR is not economically feasible.

The other alternative – forced expansion of SARR's to eliminate cross-over traffic – also directly conflicts with the basic SAC principles. As discussed above, the Guidelines give a shipper broad traffic grouping rights. These broad grouping rights include the right to design a SARR that utilizes the same "production technique[s]"[17] as the incumbent carrier. These production techniques include the right of a SARR to construct its own facilities to provide its customers with origin-to-destination service or to construct a portion of the origin-to-destination facilities and enter into interline arrangements with connecting carriers to complete the service.

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[15] Id. at 13-14.

[16] See WFA/Basin Rebuttal electronic workpaper "LRR Route Miles Rebuttal.xls."

[17] Guidelines, 1 I.C.C.2d at 528 (internal quotation omitted); see also Nevada Power I, 6 I.C.C. 2d at 45.

Thus, under the SAC test "a rail captive shipper is not required to pay more than would be necessary to replicate the rail service it needs for its own traffic."[18] A captive shipper is not required to replicate facilities it does not use. As the ICC held in Nevada Power II:

> in designing a stand-alone railroad (SARR), it may be assumed that existing single-line traffic would become interline traffic that is passed on at hypothetical interchange points. Permitting this assumption and thus crediting a SARR with so-called "cross-over traffic," will allow shippers to make effective cases before the Commission using smaller hypothetical SARRs than would otherwise be required. Viewing a SARR's interline rail partners simply as additional customers of the SARR means that the captive shipper is not required to ensure that far-flung rail lines are earning their full replacement cost of capital.

10 I.C.C.2d at 280 (Chairman McDonald commenting).

Expanding the scope of a SARR by including all cross-over traffic origin-to-destination/interchange routings also would create modeling complications and costs of monstrous proportions. For example, in the recent Xcel case, PSCo challenged BNSF's rates from the PRB to PSCo's Pawnee generating station in Colorado. 35 of the 37 PSCo SARR movements were cross-over movements.[19] The Board found in Xcel I

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[18] McCarty Farms (ICC served Feb. 13, 1995), 1995 WL 55409 at *7 (emphasis added).

[19] See Xcel I at 13.

that if the PSCo SARR were to provide origin-to-destination service for all of its traffic, the resulting SARR would be "at least 10 times larger" in length than the PSCo SARR.[20] The Board went on to hold that the resulting SARR could be even more unwieldy if PSCo decided to include other traffic moving over parts of the expanded system (which would require further expansion of the SARR to avoid the creation of new cross-over traffic). This modeling exercise, the Board correctly concluded, would produce "cascading" SARR lines and eventually require the SARR to "replicate almost all of BNSF's system."[21] The Board also correctly found that such a spider-web modeling exercise would "exponentially" expand the scope and complexities of the SAC modeling exercise to the point where the entire process becomes "intractable."[22]

The Board's findings in Xcel I apply equally in the instant case. As shown in WFA/Basin Rebuttal Exhibit III-A-1, if WFA/Basin were required to model a SARR with its current traffic group that provided origin-to-destination service for all traffic group members, its SARR railroad would be more than 37 times longer than the LRR. And the system would be substantially greater if WFA/Basin included other traffic moving over the expanded system. The results are the same as the results the Board identified in Xcel I – a "cascading" SARR that eventually would be forced to "replicate

[20] Id. at 14.

[21] Id. at 15-16.

[22] Id. at 16.

almost all of BNSF's system."[23] Here, as in Xcel, the cost and complexities of modeling a SARR that replicates BNSF's system would lead to "intractable" problems, and, in any event, be prohibitively expensive.

c. The LRR Contains Short-Haul Traffic Because it is a Short-Haul Carrier

BNSF lathers its reply with repeated references to the alleged evils of "short-haul" traffic. BNSF argues that WFA/Basin are "gaming" the system because WFA/Basin include "short-haul" traffic in the LRR.[24] BNSF's position is foolish in this case.

The LRR is modeled to follow the current BNSF route of movement for WFA/Basin trains moving from the PRB to LRS. The route mileages on the LRR for the longest of these hauls is 183 miles, and in 4Q04, the average length of the LRS haul was 171.2 miles.[25] The LRR route miles are short when compared to the BNSF average coal haul lengths – which approximate 922.1 miles.[26] However, this is not the product of any "gaming" by LRS. The LRR movement miles are shorter than the BNSF system-average coal movement miles because the LRS route miles are shorter than the BNSF system-average miles.

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[23] Id. at 15-16.

[24] See BNSF Reply Narr. at III.A-5.

[25] See WFA/Basin Op. Narr. at III-B-3 to 4.

[26] See WFA/Basin Rebuttal Workpapers, p. 00167.

Similarly, the LRR cross-over traffic miles (which average 71.1 miles) are short when compared to BNSF's system-average miles. Again, this is not the result of "gaming" but geography. The LRR traffic routes for cross-over traffic mirror the current actual BNSF routes. For example, BNSF currently originates traffic at the Eagle Butte mine and transports that traffic out of the PRB via an Eagle Butte-Donkey Creek-Alliance routing. WFA/Basin included in their SARR only the Eagle Butte-to-Donkey Creek movement miles (approximately 16.6 miles).[27] WFA/Basin did not expand their SARR to include the Donkey Creek-to-Alliance segment because the LRS trains do not utilize those lines.

Finally, the average length of LRR cross-over moves (71.1 miles) constitutes 32.6% of the LRR's total route miles.[28] This percentage is not out of the ordinary. For example, in TMPA, the average length of cross-over moves constituted 31% of the total SARR route miles.[29] Similarly, the shortest LRR movements (9.5 miles) approximate 5.1% of the total LRR route miles (188 miles).[30] Other Board-approved SARRs have had far shorter routings when measured against total SARR route miles. For

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[27] See WFA/Basin Rebuttal electronic workpaper "LRR Route Miles Rebuttal.xls."

[28] Id.

[29] See WFA/Basin Rebuttal electronic workpaper "TMPA Crossover.xls."

[30] See WFA/Basin Rebuttal electronic workpaper "LRR Route Miles Rebuttal.xls."

example, in TMPA, the shortest cross-over traffic route (10.8 miles) constituted 0.7% of the total TMPA SARR route miles.[31]

d. Traffic Group/Divisions Interplay

BNSF repeatedly argues that WFA/Basin are "gaming" the SAC process because, it opines, the LRR earns excessive revenues on its cross-over traffic.[32] BNSF's premise is wrong. As discussed in Part III-A-3 below, the LRR revenue divisions are also calculated in a very conservative fashion.

Moreover, as discussed in Part III-H-3-c below, the margins that so trouble BNSF (i.e. the positive differential between SAC revenues and SAC costs on short haul moves) play no role in WFA/Basin's RAM procedure for setting maximum rates. RAM-set rates, unlike percentage reduction-set rates, are not based on a procedure that reduces the SARR traffic group members' rates by the percentage differential between SARR revenues and SARR costs. Instead, RAM utilizes a cost-based approach where LRR traffic members pay their attributable costs and captive shippers in the LRR traffic group pay a pro-rata share of the LRR's non-attributable costs. Thus, RAM solves BNSF's asserted "gaming" contentions.[33]

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[31] See WFA/Basin Rebuttal electronic workpaper "TMPA Crossover.xls."

[32] See BNSF Reply Narr. at III.A-33.

[33] See Part III-H-3-c below.

Finally, lest there be any doubt about the matter, fundamental SAC principles hold that a shipper should model a "least cost" SARR that maximizes carriage of profitable traffic.[34] As repeatedly emphasized by the ICC and the STB:

> [t]he design of the SAC system should minimize construction or acquisition, operating and maintenance costs and/or maximize the carriage of profitable traffic.[35]

2. Volumes

On Reply, BNSF offers two SARR volume forecasts. In the first, BNSF does not "exclud[e]" any O/D shipper pairs.[36] BNSF refers to this forecast as its "Full SARR" forecast. Under this Full SARR volume forecast, BNSF calculates that the LRR will ship approximately 4.24 billion tons over the DCF period between the LRR O/D pair – i.e., approximately 59 million tons less than the tonnages WFA/Basin calculate.[37] BNSF also includes a second volume forecast that excludes certain LRR O/D volumes. BNSF refers to this forecast as its "cross-subsidy" adjusted volume forecast.[38]

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[34] See Guidelines, 1 I.C.C.2d at 543.

[35] Coal Trading (ICC decided Oct. 24, 1988) 1988 WL 225021 at *14; accord McCarty Farms (ICC decided Feb. 5, 1988), 1988 WL 225826 at *6 ("profitable traffic should be included in the group to lower the average cost of operation").

[36] See BNSF Reply Narr. at III.A-5.

[37] See BNSF Reply electronic workpaper "LRR Traffic and Revenues_WFA Basin Opening_BNSF Revised.xls."

[38] Id.

WFA/Basin address the difference between their LRR tonnage forecast and BNSF's Full SARR forecast in Part III-A-2-a and b below. WFA/Basin address BNSF's errant cross-subsidy claims, and volume adjustments, in Part III-A-2-d below.

a. <u>Historical</u>

The parties rely upon the same set of historical traffic volumes.[39]

b. <u>Projected</u>

The 60 million ton difference between WFA/Basin's Opening, and BNSF's Reply, LRR tonnage forecasts is principally due to the parties' different volume forecasting procedures for the 2006 to 2009 time period. The parties also disagree on the proper plant-specific forecasts for three O/D pairs. Each difference is discussed below.

i. <u>2006-2009 Tonnage Forecasts</u>

As shown in Rebuttal Exhibit III-A-2, most of the volume forecast differential (55 million tons) is due to the different methods WFA/Basin and BNSF employ to project traffic volumes during the 2006 to 2009 time period where no plant-specific forecasts existed. WFA/Basin developed their projections using EIA's <u>AEO 2005</u> PRB forecast.[40] This is the procedure the Board approved in <u>Xcel I</u>.[41]

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[39] <u>See</u> BNSF Reply Narr. at III.A-15 to 16.

[40] <u>See</u> WFA/Basin Op. Narr. at III-A-7.

[41] <u>See</u> <u>Xcel I</u> at 23, 53-54.

BNSF did not use the AEO 2005 forecast to project corresponding tonnages between 2006 and 2009 – though it does do so for the post-2009 time period.[42] Instead, BNSF relies upon one of its system-wide internal coal forecasts, called the Coal 2005-2009 Long Range Plan ("Long Range Plan").[43] BNSF's proposal to adjust SARR tonnages, where plant specific data is not available, using an internal BNSF system-wide forecast is identical to the procedure BNSF proposed – and the Board rejected – in Xcel.[44] BNSF does not even acknowledge, much less try to distinguish, the Board's rulings in Xcel. They clearly should be followed here for the following reasons:

- BNSF's Long Range Plan, like the BNSF "MACRO" forecast in Xcel I, applies to BNSF system-wide coal traffic. The AEO 2005 is superior because it applies to PRB coal traffic – i.e. the traffic included in the LRR traffic group.[45] See Xcel II at 15.

- The Long Range Plan forecasts tonnage increases as equaling { } of the forecasted annual change in the Gross Domestic Product index ("GDP").[46] The GDP is an index that measures changes in the market value of goods and services produced by labor and property located in the United States. The AEO 2005 is superior because it is

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[42] See BNSF Reply Narr. at III.A-17 to 19.

[43] Id. at III.A-17.

[44] See Xcel I at 53-54.

[45] See WFA/Basin Op. Narr. at III-A-7.

[46] See BNSF Reply electronic workpaper "BNSF LRP.pdf" at p.1.

an index designed specifically to forecast PRB coal traffic growth. See Xcel I at 53 (EIA forecasts PRB traffic growth).

- The AEO 2005, unlike BNSF's Long Range Plan, was prepared by a neutral third party (the EIA). As the Board observed in Xcel I, "forecasts developed by EIA are more reliable and less subject to manipulation by litigants than forecasts by private parties." Xcel I at 55.

- Consistent with Board precedent, WFA/Basin have projected coal revenues during the 2006-2009 period using the AEO 2005 PRB projections.[47] Applying the corresponding AEO 2005 tonnage forecasts produces internally consistent forecasting results. See Xcel I at 55 ("where EIA tonnage forecasts are used it is preferable to use matching EIA rate forecasts as well. This provides a single, consistent, and independent source for the coal rate and tonnage projections.")

ii. Plant-Specific Forecasts

As shown in Rebuttal Exhibit III-A-2, the remaining differences in the parties' tonnage forecast (4 million tons) are plant-specific, and involve three plants – { } plant, { } plant, and { } plant. On Rebuttal, WFA/Basin accept BNSF's technical changes to their tonnage projections for the { } and { } plants. WFA/Basin do not accept BNSF's proposed technical changes to their { } tonnage calculations.

[47] See WFA/Basin Op. Narr. at III-A-7.

Starting in 2006, WFA/Basin capped tonnage receipts at { } at { } tons annually.[48] BNSF calculates the annual tonnage cap at { } tons.[49] The difference involves the proper calculation of the plant capacity factor. WFA/Basin calculate the plant capacity factor to include the greater of (i) existing tonnage deliveries to a plant in 2004 or (ii) the amount of coal needed to operate the plant at 85% of the plant's capacity.[50]

Applying these procedures, WFA/Basin capped tonnage receipts at { } at { } tons annually. The cap includes { }.[51] BNSF, on the other hand, included only { } tons for { } movements. The { } tons were set forth in BNSF's 2004 forecast of { } tonnages.[52] The { } tons constitutes the difference between WFA/Basin's use of actual 2004 deliveries { } and BNSF's use of forecasted deliveries { }.

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[48] See WFA/Basin Op. electronic workpaper "LRR Traffic and Revenues_WFABasin Opening.xls."

[49] See BNSF Reply Narr. at III.A-19 to III.A-20.

[50] See WFA/Basin Opening Narr. at III-A-8.

[51] See WFA/Basin Opening electronic workpaper "LRR Traffic and Revenues_WFABasinOpening.xls."

[52] See BNSF Reply III.A-3 workpaper No. 00993.

WFA/Basin's plant capacity cap methodology determines a plant's maximum capacity, taking into consideration existing plant operating characteristics and existing coal type and sources. Accordingly, it correctly relies upon the maximum tonnage figure presented, whether it be actual or forecasted volumes. To take the lesser of the forecasted or actual amounts shipped to a specific location, as BNSF proposes, would understate the capacity available at the plant, and the tonnage available to the SARR.

iii. Projection Summary By Year

Rebuttal Table III-A-1 below summarizes WFA/Basin's LRR rebuttal system tonnages.

Rebuttal Table III-A-1
LRR System Tonnage

Time Period	Tonnage (Millions of Tons)
4Q 2004	48.4
2005	205.3
2006	207.5
2007	208.7
2008	210.3
2009	212.9
2010	213.8
2011	214.9
2012	215.7
2013	216.1
2014	216.3
2015	216.7
2016	217.0

2017	217.2
2018	217.6
2019	218.4
2020	218.5
202	218.7
2022	219.0
2023	219.4
1Q-3Q 2024	164.9

3. Revenues

a. Single-Line Revenue

On Opening, WFA/Basin projected BNSF's revenues for the LRS movement using BNSF's initial tariff rates, adjusted by forecasted changes in the RCAF-U during the twenty year DCF period.[53] This is exactly the same procedure the Board applied in Xcel I and TMPA.[54]

BNSF asserts that WFA/Basin's LRS rate calculations are wrong because (i) this procedure purportedly violates BNSF's statutory authority to initiate rates under

[53] See WFA/Basin Op. Narr. at III-A-13 to 14.

[54] See Xcel I at 55; TMPA at 27 n.63.

49 U.S.C. §10701(c);[55] (ii) the LRS rates are "commercially reasonable,"[56] and (iii) WFA/Basin "fail[ed] to [c]onsider" BNSF's fuel surcharge.[57] Each contention is wrong.

i. WFA/Basin's LRS Rate Calculations Fully Comply with Governing Law

BNSF argues that the law permits a carrier to initiate tariff rates and tariff rates adjustment procedures, citing 49 U.S.C. §10701(c). That is true. However, the law also permits a shipper to challenge the lawfulness of the initial tariff rates, and the procedures used to adjust these rates, or both.[58] WFA/Basin make both challenges.

BNSF's initial tariff rates (effective in October 1, 2004) equal $5.69 per ton from Southern PRB mines; $5.97 per ton from Central PRB mines; and $6.15 per ton from Northern PRB mines. To demonstrate that these rates are unlawfully high, WFA/Basin applied the Board's SAC test. Under the SAC test, the challenged tariff rates are deemed unreasonable if, over the twenty year DCF period, SARR revenues exceed SARR costs. WFA/Basin's opening evidence demonstrated that SARR revenues (which

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[55] See BNSF Reply Narr. at III.A-24.

[56] Id. at III.A-25.

[57] Id. at III.A-27.

[58] See WFA/Basin Op. Narr. at II-30 to 32.

include BNSF's price-inflation adjusted tariff rates) vastly exceed SARR costs.[59] Accordingly, the initial rates are unreasonable.

WFA/Basin also challenge the lawfulness of BNSF's procedures to adjust the initial tariff rates. As described in detail in WFA/Basin's opening evidence, these procedures consist of a complex mix of fixed rate increases, fuel surcharges and RCAF-U (minus fuel) adjustments.[60] WFA/Basin demonstrated that the rate adjustment procedures constitute an unreasonable practice because the adjusted rates produce revenues that are nearly $500 million higher than the revenues produced under the unreasonable initial tariff rates.[61]

WFA/Basin's challenge does not violate 49 U.S.C. § 10701. WFA/Basin's challenge starts – as it must – with BNSF's initially published tariff rates and with BNSF's published tariff rate adjustment procedures. WFA/Basin demonstrate that both the initial rates, and the rates adjustment procedures, are unlawful.

BNSF also argues that the Board in some prior SAC cases has projected rates, for DCF purposes, using the carrier's tariff adjustment procedures.[62] However, in

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[59] WFA/Basin's rebuttal evidence confirms this result. See WFA/Basin Rebuttal electronic workpaper "Exhibit_III-H-1.xls."

[60] See WFA/Basin Op. Narr. III-A-11 to 13.

[61] See WFA/Basin Op. Narr. at III-A-14. WFA/Basin's rebuttal evidence confirms this result. See WFA/Basin Rebuttal electronic workpaper "Alternative LRR DCF Model.xls."

[62] See BNSF Reply Narr. at III.A-25.

each of these cases there was no challenge to the lawfulness of the carrier's rate adjustment procedures and the procedures the Board applied to adjust the issue rates were similar to, or identical to, the procedures WFA/Basin employed here. Also, in other cases, the STB has not applied the carrier's adjustment procedure to adjust issue traffic rates for DCF purposes.[63]

ii. BNSF's Commercial Justifications are Irrelevant and Wrong

Next, BNSF argues that the Board should apply its proposed fixed rate adjustments in the DCF analysis because these adjustments are "commercially reasonable."[64] As WFA/Basin have demonstrated in detail in their prior evidence and filings[65] and in Part III-H below,[66] BNSF's rate adjustments are not reasonable under any standard, including BNSF's self-asserted "commercial reasonableness" test.

In any event, BNSF, by its own admission, possesses monopoly power over the LRS movement. The law requires that BNSF's rates pass muster under the reasonableness standards the Board administers. These standards are intended to prevent monopoly carriers like BNSF from extracting excessive profits from captive shippers like

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[63] See APS I, 2 S.T.B. at 389-91.

[64] See BNSF Reply Narr. at III.A-25 to 27.

[65] See WFA/Basin Op. Narr. at I-30 to 32; III-A-13.

[66] See WFA/Basin Rebuttal Narr. at III-H-5 to 14.

WFA/Basin at LRS. BNSF's initial tariff rates, and its procedure to adjust these rates, are unlawful under governing law.

iii. WFA/Basin's Use of the RCAF-U to Project the LRR Tariff Rates does not Understate BNSF's Fuel Costs

WFA/Basin adjust BNSF's initial tariff rates by the RCAF-U. BNSF argues that this adjustment procedure understates BNSF's fuel cost increases because it contains no fuel surcharge. BNSF is wrong. As the Board knows, the RCAF-U is an index that measures changes in prices paid by Class I railroads (including BNSF) to provide rail service.[67] Fuel prices are a principal component in the RCAF-U.[68] Each quarter the STB forecasts railroad fuel prices in the next quarter (relying on forecast data supplied by the rail industry including BNSF).[69]

BNSF argues that the RCAF-U "has not kept pace with BNSF's" LRS fuel price increases.[70] BNSF purports to prove this point by a comparison. According to BNSF, the price it paid to fuel LRS trains in 2004 increased by { } in 2004. BNSF

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[67] See Railroad Cost Recovery Procedures, 1 I.C.C.2d 207 (1984).

[68] See Quarterly Rail Cost Adjustment Factor, STB Ex Parte No. 290 (Sub-No. 5) (STB served Sept. 20, 2005). Indeed, when the ICC first promulgated the RCAF-U it held "[m]aintaining a separate surcharge mechanism for fuel would ... serve no useful purpose...." Railroad Cost Recovery Procedures, 364 I.C.C. 841, 852 (1981).

[69] Id.

[70] See BNSF Reply Narr. at III.A-28.

then observes that the RCAF-U increased by 7.02% in 2004.[71] BNSF's "comparison" is obviously flawed. The proper comparison is between BNSF's correct fuel price increase in 2004 versus increases in the fuel price component in the RCAF-U. In 2004, BNSF's system-average fuel price increased by { }.[72] The fuel component in the RCAF-U increased by { }.[73]

In addition, as shown in Rebuttal Exhibit III-A-3, BNSF's proposed fuel surcharge mechanism vastly overstates BNSF's actual projected fuel cost increases. For example, in 4Q04, WFA/Basin paid fuel surcharges of 0.62 per ton. A cost-based fuel surcharge equals only $0.11 per ton.

b. Divisions – Existing Interchanges

The parties agree that the LRR interchanges no traffic at existing BNSF interchanges.

c. Divisions – Cross-Over Traffic

The first step in the STB-approved process to calculate SARR cross-over traffic divisions is to identify the total line-haul rates the SARR and the incumbent carrier would divide. In their opening evidence, WFA/Basin calculated line-haul divisions using

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[71] Id.

[72] See WFA/Basin Rebuttal electronic workpaper "BNSF Fuel Price Relative to HDF Costs.xls."

[73] Id.

the MSP procedures the Board approved in Xcel and other recent cases.[74] BNSF projects line-haul revenues from cross-over traffic using two approaches: an "adjusted MSP" approach and an "avoided cost" approach.[75] Each is discussed below.

i. Line-Haul Pricing Forecasts – MSP

BNSF's "adjusted MSP" approach accepts WFA/Basin's MSP line-haul pricing forecasts, and forecasting procedures, over the 20 year DCF period, except as follows:

(a) Prescribed Rate Forecasts

WFA/Basin's traffic group includes two shippers { } that transport traffic under STB-prescribed rates. WFA/Basin utilized the Board's prescribed rates during the term of the rate prescriptions to forecast LRR revenues on the involved movements.[76] BNSF accepts this approach, but updates the prescribed rates to reflect Board-ordered changes in these prescriptions.[77] WFA/Basin accept the changes and include them in their Rebuttal LRR revenue calculations.[78]

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[74] See WFA Op. Narr. at III-A-15.

[75] See BNSF Reply Narr. at III.A-49 to 57.

[76] See WFA/Basin Op. Narr. at III-A-16.

[77] See BNSF Reply Narr. at III.A-59.

[78] Revised rates to {
______ } Revised rates to {
______ }.

(b) **Contract Rate Forecasts**

WFA/Basin's traffic group also includes shippers that are currently transporting coal under contracts with BNSF. WFA/Basin forecast contract rates, over the term of the contract, using the contract rate adjustment procedures.[79] Some of these contract adjustment procedures incorporate changes in the RCAF-U and RCAF-A. Consistent with Board precedent, WFA/Basin utilized forecasts prepared by Global Insight to project changes in these RCAF indices.[80] On Rply, BNSF accepts this approach but substitutes the March 2005 Global Insight forecast for the December 2004 Global Insight Forecast used by WFA/Basin.[81] On Rebuttal, WFA/Basin utilize Global Insight's June 2005 RCAF forecasts, which were issued after the filing of BNSF's Reply.

(c) **Revenue Forecasts During 2006 to 2009**

In the absence of a controlling BNSF pricing document adjustment procedure, WFA/Basin forecast revenues utilizing the AEO 2005.[82] BNSF also relies upon the AEO 2005 to project corresponding revenues after 2009. However, for the 2006

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[79] See WFA/Basin Op. Narr. at III-A-16.

[80] See WFA/Basin Op. electronic workpaper "Exhibit_III-H-1.xls."

[81] See BNSF Reply electronic workpaper "LRR Traffic and Revenues_WFABasinOpen_BNSF Revised.xls."

[82] See WFA/Basin Op. Narr. at III-A-16.

to 2009 time period, BNSF substitutes internal system-wide BNSF coal price forecasts contained in its Long Range Plan.[83]

WFA/Basin's approach complies with the Board's Xcel rulings. BNSF's approach does not – and was specifically rejected in Xcel.[84] The Board should similarly reject BNSF's approach in the instant case for the same reasons the Board rejected it in Xcel.

- BNSF's Long Range Plan, like the BNSF "MACRO" forecast in Xcel, forecasts changes in BNSF's system-wide coal traffic, not just BNSF's PRB coal traffic. The AEO 2005 is superior because it applies to PRB coal traffic – i.e. the traffic included in the LRR traffic group.[85]

- BNSF's Long Range Plan forecasts revenue growth using a fixed annual percentage increase of { }. Neither the Long Range Plan, nor BNSF on Reply, provides any basis or support for this figure. In contrast, the AEO 2005 projections are fully supported and specifically designed to forecast price changes in PRB coal traffic.[86]

- The AEO 2005, unlike BNSF's Long Range Plan, was prepared by a neutral third party (the EIA). As the Board observed in Xcel I, "forecasts developed by

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[83] See BNSF Reply Narr. at III.A-59 to 61.

[84] See Xcel I at 55.

[85] See Xcel II at 15.

[86] See Xcel I at 55 (EIA forecasts PRB rate changes).

EIA are more reliable and less subject to manipulation by litigants than forecasts by private parties." Xcel I at 55.

- Consistent with Board precedent, WFA/Basin have projected coal volumes during the 2006-2009 period using the AEO 2005 PRB projections. Applying the corresponding AEO 2005 revenue forecasts produces internally consistent forecasting results.[87]

(d) Fuel Surcharge Projections

BNSF has published a tariff containing a fuel surcharge on coal traffic. This surcharge is set forth in Item 3380 of BNSF's Rules Book, 6100-A. The fuel surcharge is pegged to changes in the average price of Retail On-Highway Diesel Fuel, as calculated by EIA. The pricing documents applicable to some members of the LRR traffic group include BNSF's fuel surcharge tariff.[88]

In their opening evidence, WFA/Basin calculated fuel surcharge revenues using actual tariff surcharges through 1Q2005.[89] WFA/Basin projected post-1Q2005 fuel surcharges using EIA's most recent forecast of diesel fuel price changes. In its reply

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[87] Id. ("where EIA tonnage forecasts are used it is preferable to use matching EIA rate forecasts as well. This provides a single, consistent, and independent source for the coal rate and tonnage projections.")

[88] BNSF's tariff surcharge is applicable to coal moving to {

}.

[89] See WFA/Basin Op. electronic workpaper "LRR Traffic and Revenues_ WFABasin Opening.xls."

evidence, BNSF updates WFA/Basin's forecast by including actual 2Q2005 surcharges.[90] WFA/Basin accept this update and make three additional changes as well: WFA/Basin correct their Opening surcharge calculations to reflect the two-month lag in the Retail On-Highway Diesel Fuel price average used to calculate the fuel surcharge rate; WFA/Basin update fuel surcharge calculations to reflect the actual fuel surcharge percentages through October 2005 (the latest period available); and WFA/Basin assume the November and December 2005 fuel surcharge percentages will equal the October 2005 fuel surcharge percentage.[91]

For surcharge periods after 2Q2005, BNSF does not utilize the EIA diesel fuel price forecast. Instead, BNSF utilizes an index it calls the "RCAF Fuel" forecast.[92] WFA/Basin's projections using EIA diesel fuel price forecasts are clearly superior to BNSF's RCAF Fuel forecast for two reasons.

First, the EIA diesel fuel (distillate) index has historically better tracked the actual changes in the Retail On-Highway Diesel Fuel price index BNSF utilizes to calculate its fuel surcharge. As shown on Page 1 of Rebuttal Exhibit III-A-4, the annual-percent change in EIA's historic diesel fuel (distillate) price index has moved in virtual

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[90] See BNSF Reply Narr. at III.A-61.

[91] The reason for this assumption is due to the 2005 SARR rates being calculated on an annual basis and not a monthly basis as is BNSF's real-world fuel surcharge. See WFA/Basin Rebuttal electronic workpaper "LRR Traffic and Revenue_WFABasinRebuttal.xls."

[92] See BNSF Reply Narr. at III.A-61.

lock-step with the change in Retail On-Highway Diesel Fuel prices. In contrast, while the BNSF's RCAF Fuel index has moved in a vaguely similar pattern to the Retail On-Highway Diesel Fuel prices, it has not mirrored the change as well as the EIA's historic diesel fuel (distillate) price index. See Exhibit III-A-4, p. 2. Second, the EIA's forecast is an unbiased forecast of future diesel fuel (distillate) prices by a neutral third party. BNSF's made-for-litigation forecast is not.

ii. Line-Haul Price Forecasts – Avoidable Cost

BNSF serves up a second method to forecast LRR revenues. Under BNSF's alternative approach, revenues on the on-SARR segment of LRR cross-over movements are set at BNSF's avoidable costs, and adjusted by the RCAF-A.[93] As discussed in detail below, BNSF's avoidable cost method is dead-on-arrival.

iii. Line-Haul Divisions

Once line-haul rates are identified, the second step in the STB-approved revenue process is to calculate the LRR's division of the total projected line-haul revenue for each cross-over movement. WFA/Basin utilized the Board's MSP procedure to calculate divisions on LRR cross-over traffic. As WFA/Basin explained in detail in their opening evidence, the Board has used this MSP method, or its predecessor the Block Methodology, to set SARR divisions in its last nine SAC cases involving cross-over

[93] See BNSF Reply Narr. at III.A-49 to 50.

traffic.[94] BNSF's reply evidence contains a long-winded, repetitive and vituperative attack on WFA/Basin's use of the Board-approved MSP approach.[95] As discussed below, none of BNSF's challenges has any merit. On Rebuttal, WFA/Basin continue to set LRR divisions on cross-over traffic using MSP.

(a) Burden of Proof

BNSF argues that WFA/Basin failed to demonstrate that MSP is a valid means of setting divisions on cross-over traffic. BNSF is wrong. The Board, and the ICC before it, have consistently used MSP, or its predecessor, the MMP methodology, to set cross-over divisions in all SAC cases since 1994.[96] These cases have included several cases involving SARRs which, like the LRR, originate PRB cross-over traffic.[97]

As the Board observed in PPL, if a party challenges use of the established method for establishing SARR divisions, the burden is on the party making the challenge to demonstrate that the method should not be employed in the particular case.

> The modified mileage proration process is an accepted and widely used tool for apportioning revenues between carriers. But if that procedure is not appropriate to use in a particular case, the parties to that case can let us

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[94] See WFA/Basin Op. Narr. at III-A-18 n.30.

[95] See BNSF Reply Narr. at III.A-30 to 35.

[96] See McCarty Farms at 472; FMC at 31; Duke/NS I at 25; CPL at 21; Duke/CSX at 22; Xcel I at 17-19; and Xcel II at 11.

[97] See WPL at 24; TMPA at 31; Xcel I at 17-19.

> know, and we will use whatever is the most appropriate procedure for apportioning revenues for that case.

PPL (STB decision served Nov. 27, 2001) at 6 n.18.

The Board reaffirmed the PPL rule in Xcel. As stated recently by Board counsel:

> In [the Xcel] proceeding, while Xcel asked the Board to follow precedent by using the MSP method of allocating revenues from cross-over traffic, BNSF criticized MSP .... BNSF argued [for an] alternative method.... The burden was on BNSF to make a convincing showing that its alternative approach was superior to the general approach the agency had used since 1994, as there is a "norm of regularity" in government conduct that presumes an agency's duties are "best carried out if the settled rule is adhered to."

Board's Xcel Brief at 52.

Thus, the burden falls on BNSF to demonstrate that MSP is "not appropriate"[98] for use in this case.[99]

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[98] See PPL at 6 n.18.

[99] Also, on opening, WFA/Basin introduced substantial "real world" market and cost evidence – which stands unrebutted – demonstrating that MSP provides a conservative estimate of the LRR's divisions. See WFA/Basin Op. Narr. at III-A-18, Op. Exhibit III-A-3 and Op. Exhibit III-A-4.

(b) Avoidable Cost Divisions

BNSF's principal attack on MSP is a theoretical one. BNSF claims that MSP is not an appropriate method to set divisions on cross-over traffic because the results are inconsistent with "contestability" theory.[100] According to BNSF, "contestability theory" holds that a SARR should be seen as a competitor to the incumbent railroad – i.e., both serve the same market and both compete with each other. Under this contestability scenario, BNSF posits that a SARR, and the incumbent, would compete for the LRR customers by "shouting out" rate offers until BNSF shouted out its final offer – providing the service at its avoidable costs. The final offer, under BNSF's theory, sets the SARR's division.[101]

BNSF calculates "avoidable costs" as equaling BNSF's URCS variable costs for providing the service.[102] For example, for an LRR traffic movement between the Cordero Mine and Guernsey, BNSF would set the LRR division to equal BNSF's URCS variable cost for providing this service.

The STB, and the ICC before it, have consistently rejected carrier-sponsored proposals to set SARR divisions at "avoidable cost" or other levels generally

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[100] See BNSF Reply Narr. at III.A-35 to 45.

[101] Id.

[102] Id. at III.A-50.

equal to, or near, the incumbent carrier's URCS costs.[103] BNSF is forced to admit that its avoidable cost divisions proposal has been "rejected" in prior cases, but asks the Board to reconsider these rulings.[104] BNSF's assorted arguments – which focus on the ICC's Nevada Power decision – provide no rational basis for overruling Nevada Power and its progeny.

First, BNSF argues that the ICC and the STB have misapplied contestability theory in consistently holding that a SARR should be viewed as a replacement for – not a competitor of – the incumbent carrier over a SARR system.[105]

The ICC, and the STB, have not misapplied contestability theory – BNSF has. Under BNSF's application of contestability theory, the new entrant SARR must beat a price for cross-over traffic predicated upon the incumbent's expected competitive response to the new entrant's price. This result turns contestability theory upside down.

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[103] See, e.g., Nevada Power I, 6 I.C.C.2d at 45-46; McCarty Farms, 2 S.T.B. at 472; Duke/NS I at 19.

[104] See BNSF Reply Narr. at III.A-46.

[105] See Nevada Power II, 10 I.C.C.2d at 267 ("we view the entrant as if it were a replacement for that segment of the rail system whose services the entrant would be offering"); accord AEPCO (STB served Aug. 20, 2002) at 6 n.9 ("contestable market theory allows for the simulation of a competitive price by calculating what a hypothesized efficient producer would need to change to provide replacement service"); McCarty Farms, 2 S.T.B. at 472 ("[a]s the ICC explained at some length in Nevada Power II... it would be inconsistent with the nature and purpose of a SAC analysis to treat the SARR as a competitor of the incumbent railroad rather than its replacement"); WTU, 1 S.T.B. at 670 (a SARR is "a replacement carrier that steps into the shoes of the incumbent carrier for the segment of the rail system that the SARR would serve").

Contestability theory is predicated upon potential entrants evaluating "the profitability of entry at the incumbent firms' pre-entry prices" without "fear of retaliatory price alterations" by the incumbent.

> A contestable market is one in which the positions of incumbents are easily contested by entrants. In brief, a perfectly contestable economic market is defined to be one into which entry is completely free, from which exit is costless, in which entrants and incumbents compete on completely symmetric terms, and entry is not impeded by fear of retaliatory price alterations.
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> * * *
>
> the potential entrants evaluate the profitability of entry at the incumbent firms' pre-entry prices. That is, although the potential entrants recognize that an expansion of industry outputs leads to lower prices – in accord with the market demand curves – the entrants nevertheless assume that if they undercut incumbents' prices they can sell as much of the corresponding good as the quantity demanded by the market at their own prices.

Baumol, Danzar and Willig, <u>Contestable Market and the Theory of Industry Structure</u> at 349, 5 (Rev. ed. 1988) ("<u>Contestable Markets</u>"); <u>accord</u> Bailey & Baumol, <u>Deregulation and the Theory of Contestable Markets</u>, 1 Yale J. on Reg. 111, 114 (1984) ("[a] contestable market works most effectively if, in response to a profit-making opportunity, new firms can enter quickly, earn profits at least temporarily (before incumbents can constitute countermeasures) and then leave without any loss of investment or sunk capital").

Similarly, as noted by another scholar:

> The results of contestability theory require not only that rapid entry and exit be possible, but that potential entrants make their decisions taking the market price as given. This definition defines sustainability in terms of entrant profitability given the number of incumbents, their output, and the price at which that output clears the market. Under this definition of sustainability, the entrant is not permitted to take account of the price reduction that its own output will produce when it assesses the profitability of entry. The entrant is not permitted to take account of possible reactions of incumbents. Hit-and-run entry is supposed to occur if the potential entrant could make a profit at the pre-entry price. If the potential entrant comes into the market only if it could make a profit at the expected post-entry price, hit-and-run entry is much less plausible.

S. Martin, <u>The Theory of Contestable Markets</u> at 10 (July 2000) (footnote omitted) (<u>see</u> WFA/Basin electronic workpaper "Theoryofcontestablemarkets.pdf").

Thus, under basic principles of contestability theory, the new entrant is not a competitor of the incumbent for the business it solicits – it replaces the incumbent for that business. Otherwise, the new entrant could not evaluate "the profitability of entry at the incumbent firm's pre-entry prices."[106] And the new entrant would not set its own prices without "fear of retaliatory price alterations" by the incumbent.[107]

The ICC recognized, and applied, these fundamental contestability principles in Nevada Power. In Nevada Power, the defendant carrier (UP) argued that a SARR should be viewed as a competitor of the incumbent for the SARR's traffic.[108] UP further argued that the resulting competition would result in SAC divisions that approximated UP's variable service costs.[109] Nevada Power, on the other hand, argued that its SARR was "a replacement for those lines of the incumbent carriers that are replicated" and that the SARR should earn the divisions the replacement SARR and the residual UP would negotiate in the marketplace.[110]

After carefully reviewing the Guidelines, and contestability theory, the ICC correctly held that the SARR must be viewed as a replacement for the incumbent carrier on the lines over which the SARR provides service, not a competitor. In so holding, the

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[106] See Constable Markets at 5.

[107] Id. at 349.

[108] See Nevada Power II, 10 I.C.C.2d at 265.

[109] Id. at 266.

[110] Id. at 265.

ICC correctly stated that "we cannot take account of any post-entry responses by the incumbents."[111] This clearly accords with contestable market theory.[112]

The ICC also held that UP's competition construct "would perpetuate UP's hold over this captive market because ... a potential entrant will shun a market when price retaliation by the incumbent reduces revenue before the entrant has a chance to recoup its costs." Id. at 266 (internal quotation marks omitted). This conclusion is also consistent with the basic precepts of contestability theory. See Contestable Markets at 349 (entry into a contestable market "is not impeded by fear of retaliatory price alterations").[113]

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[111] Id. at 267.

[112] See Contestable Markets at 5 ("potential entrants evaluate the profitability of entry of the market firms' pre-entry prices").

[113] Similarly, the STB has observed:

> Contestable market theory would allow instantaneous exit and reentry. However, our SAC constraint does not assume such immediate exit and reentry activity for the SAC carrier. Rather, it judges the financial decision to enter the market by the final outcome at the end of the forecasted SAC period (in this case, 20 years). The purpose of this hypothetical exercise is to determine if the SAC carrier could provide the service over the course of the forecasted SAC period at rates below those charged by the defendants.

Ashley Creek Phosphate Co. v. Chevron Pipe Line Co., STB No. 40131 (Sub-No. 1) (STB Issued Oct. 30, 1996) at 1996 WL 625471, *20 n.36.

Following its Nevada Power ruling, the ICC, and the Board, have consistently and correctly held that a SARR must be viewed as a replacement for, not a competitor of, the incumbent. See McCarty Farms 2 S.T.B. at 472; WTU 1 S.T.B. at 670; AEPCO at 2. BNSF's contention that a SARR should be viewed as a competitor of, not a replacement for, the incumbent, with resulting divisions set at levels equal to the incumbent's variable costs, finds no support whatsoever in contestability theory as properly construed and applied by the ICC and the Board in prior cases.

Second, BNSF argues that the Board may wish to revisit Nevada Power because "[i]t is reasonable to assume that at the time it rendered Nevada Power, the ICC did not anticipate that shippers would make such extensive use of cross-over traffic."[114] BNSF's contentions here are belied by the facts in Nevada Power, where cross-over traffic dominated the SARR. See Nevada Power II at 265 ("cross-over traffic represents approximately 60% of the traffic in the [Nevada Power SARR]").

In addition, the STB has repeatedly reaffirmed Nevada Power II, most recently in its March 15, 2005 decision in AEPCO (id. at 2 (SARR is an "efficient replacement carrier") and repeatedly reaffirmed the propriety of using cross-over traffic in

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[114] See BNSF Reply Narr at III.A-46.

SARR modeling.[115] Thus, there are no pertinent case-specific developments since Nevada Power II that require the Board to revisit its decision.[116]

Third, BNSF argues that the Board should revisit Nevada Power II because UP did not appeal the Nevada Power II decision. BNSF's reply states in pertinent part:

> because Union Pacific prevailed in the *Nevada Power* proceeding, it had no opportunity to appeal the ICC's decision that (1) permitted cross-over traffic, (2) employed a modified mileage prorate in estimating divisions on cross-over traffic, and (3) rejected Union Pacific's testimony on the application of contestability principles as the basis for establishing revenue divisions on cross-over traffic.

BNSF Reply Narr. at III.A-46.

UP did not appeal Nevada Power II, but UP has had the opportunity to address SARR cross-over traffic revenue divisions issues in two post-Nevada Power II cases – FMC and WPL. In WPL UP accepted, without contention, the use of the Board's MMP methodology to set SARR divisions.[117] And in FMC, UP asked the Board to apply a modified MMP methodology that provided increased divisions for short-haul movements from those calculated under the MMP methodology or MSP.[118]

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[115] See, e.g. Xcel I at 16-17.

[116] Id.

[117] See WPL I at 24.

[118] See FMC at 30-31. In Nevada Power II UP urged the ICC to set cross-over divisions using an "efficient component pricing rule." Id. at 266. The ICC subsequently,

Fourth, BNSF maintains the ICC was wrong in concluding that setting SARR divisions at the incumbent's variable costs for the service "would not permit a SARR to recover its fixed costs.[119] BNSF's argument is absurd. UP candidly "admitt[ed]" in Nevada Power that setting SARR divisions at the incumbent's variable costs "would allow for only a minimal contribution to [the Nevada Power SARR's] joint and common costs." Nevada Power II, 10 I.C.C.2d at 266. The same is true in this case. By definition, variable costs do not include any contribution to fixed costs.

Finally, BNSF cites a reference in the Guidelines calling for potential modifications to the Guidelines to make the Guidelines "fully workable." Id. at 525. However, it was clear in Nevada Power II – and has been clear ever since – that presuming a SARR to be a competitor of the incumbent, and setting SARR divisions at the incumbent's variable costs, would make the Guidelines fully unworkable.

The Board has urged parties to SAC cases not to reargue settled issues unless they can present new evidence or arguments:

> the parties to SAC cases are cautioned not to attempt to relitigate issues that have been resolved in prior cases. Unless new evidence or different arguments are presented, we will adhere to precedent established in prior cases.[120]

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and specifically, rejected use of this approach in McCarty Farms. Id. at 471-72.

[119] See BNSF Reply Narr. at III.A-47.

[120] See General Procedures at 6.

BNSF presents no new arguments or evidence here – it simply repeats arguments that the ICC and the STB have consistently rejected in Nevada Power and other cases.

(c) **"Modified" MSP**

BNSF asks the Board to consider a second method to set cross-over divisions if the Board rejects its avoidable cost divisions proposal. BNSF calls its second proposal a "modified" MSP approach.[121] Under the "modified" MSP approach the 100-mile MSP origin and destination blocks are reduced to 25 miles (for trains with shipper supplied cars) and 57 miles (for trains with carrier-supplied cars).[122]

BNSF developed its mileage block adjustments by purportedly calculating the "system-average" origination and termination URCS variable costs for BNSF traffic in 2002. BNSF's calculations produce a system-average cost per car of { }. Next, BNSF purports to calculate the corresponding origination and destination costs for { } car unit trains of shipper supplied and carrier supplied cars. BNSF calculates these costs at { } per railroad owned car and { } per shipper-owned car. BNSF then determines, using those figures, that unit train shipment origination/destination costs constitute { } of BNSF's system-average origination costs in shipper cars { } and { } of BNSF's system-average origination costs in railroad cars

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[121] See BNSF Reply Narr. at III.A-51.

[122] Id.

{ }. BNSF proceeds to reduce the MSP 100 mile origin and destination mileage blocks to 25 miles (for shipper car movements) and 57 miles (for car movements).[123] BNSF's "modified MSP" approach, like its avoidable cost approach must be rejected.

First, as discussed above, the ICC and the Board have consistently rejected SARR divisions methodologies that set SARR divisions at levels equal to or near the incumbent's variable costs for providing service over the SARR. As the ICC stated in Nevada Power II, cross-over divisions set at or near the incumbent's variable cost levels "would allow for only a minimal contribution to the [SARR's] joint and common costs."[124] The ICC rejected this result as fundamentally inconsistent with governing SAC principles because it "reduces revenue before the entrant has the chance to recover its costs."[125]

Similarly, the Board observed in Duke/NS I that setting cross-over divisions "down close to variable cost levels" would require that non-cross-over traffic "bear[] most of the fixed cost of the [SARR]" and "[t]he end result would deprive each

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[123] See BNSF Reply electronic workpaper "BNSF URCS 2004.zip." BNSF goes on to claim that the results of its URCS analysis are supported by its calculations of variable costs for the LRS movement and by WFA/Basin's calculation of stand-alone costs for the LRR. See BNSF Reply Narr. at III.A-54.

[124] Id., 10 I.C.C.2d at 266.

[125] Id.

complainant shipper of the benefit of grouping traffic (i.e. realizing the economies of scale, scope and density) held out to them in Guidelines." Id. at 18-19.

BNSF's own evidence shows that its modified MSP approach produces results that the ICC and the Board have consistently rejected – i.e., divisions at or near the incumbent's variable service costs. For example, BNSF calculates the aggregate URCS variable costs for the LRR cross-over traffic at { } million in 2005.[126] Using its modified MSP approach, BNSF calculates aggregate cross-over traffic LRR divisions in 2005 at { } million in 2005. The resulting R/VC ratio approximates { } ({ } million ÷ { } million). BNSF's modified MSP calculations must be rejected for the very same reasons the Board has rejected other case proposals to set SARR divisions at the incumbent's variable costs – they produce ridiculously low results.

Second, BNSF mistakenly assumes that the MSP 100-mile origin and destination blocks are a cost-based "system-average" block of costs akin to an URCS system-average cost.[127] BNSF's 25/57 mileage block adjustments use URCS procedures to make a unit train-based downward adjustment to the asserted costs.

In fact, the 100-mile origin/destination blocks are not intended to – and do not – measure costs. Instead, the 100-mile blocks are intended to capture market-based revenues that apply regardless of the type of traffic involved. Thus, BNSF's study is

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[126] See WFA/Basin Rebuttal electronic workpaper "BNSF 2005 Variable Cost.xls."

[127] See BNSF Reply Narr. at III.A-52.

predicated on a false starting premise – the 100-mile block is a pool of system-average costs – which leads BNSF to reach an invalid answer – the block should be reduced to reflect unit train efficiencies.

MSP is a "smoothed out" version of the MMP methodology.[128] The Board uses MMP to calculate actual, market-based divisions on traffic contained in its waybill sample. The Board's waybill sample contains statistical data collected from terminating waybill carriers.[129] The data includes the line-haul revenues. For movements involving two or more carriers, the line-haul revenue shown on the waybill data is typically aggregated. For example, in a two carrier line-haul move, the waybill data will show the total line-haul charge invoiced to the shipper. The waybill data does not show the division earned by each carrier.

The Board uses the waybill data for various carrier-specific analyses. As part of these analyses, the Board must determine what each carrier charges on its portion of a joint haul. Since this division data is not captured in the waybill, the Board uses the MMP method to estimate each carrier's actual revenue divisions. Under MMP "each carrier is assigned one 'block' for every 100 miles or part thereof that its carries the traffic, plus an additional block for originating or terminating the traffic; the total revenues are then allocated based on each carrier's share of the total number of

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[128] See Duke/NS I at 24.

[129] See 49 C.F.R. § 1244.

blocks."[130] The purpose of MMP is to obtain an accurate estimate of the actual market divisions earned by the waybill sample carriers.

BNSF argues that the 100-mile origin and destination blocks are intended to measure origin and destination service costs. In support of this position, BNSF cites the Association of American Railroads ("AAR") Waybill Sample User's Guide. This User's Guide describes the 100-mile origin block as "allow[ing] for pick-up and switching expenses" and describes the 100-mile destination block as "allow[ing] for delivery expenses."[131] While the 100-mile origin and destination blocks "allow" for origin and destination handling costs, the blocks are not intended to directly measure these costs. Instead, the sole purpose of the Board's MMP methodology (including the 100-mile origin/destination blocks) is to measure market-based revenue divisions.

The Board uses MMP-derived divisions to construct carrier specific revenues. The Board's costed waybill procedure utilizes these revenues, and railroad costs determined using URCS procedures, to develop R/VC ratios. Significantly, the Board does not use MMP to calculate costs because it would be inappropriate to do so. Instead, it uses MMP to calculate revenues.

The STB also utilizes the 100-mile origin and destination blocks to measure revenue divisions on all traffic captured by the waybill sample – including single car,

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[130] See Duke/NS I at 17.

[131] See AAR User Guide for the 1996 Surface Transportation Board Waybill Sample at 8-33 (July 30, 1997).

multiple car and unit train traffic. The STB, and the ICC before it, never saw any need to modify the origin blocks to account for allegedly different cost structures for the involved traffic. The Board, and the ICC, have for over 25 years considered the MMP origin/destination blocks to be part of a revenue allocation procedure designed and intended to produce accurate estimates of revenue divisions on all types of traffic.

Similarly, the ICC and the STB have consistently relied upon the MMP and MSP methods to provide an accurate estimation of market-based divisions in SAC cases.[132] The evidence WFA/Basin present in this case demonstrates that MMP, and MSP, do in fact produce reliable estimates of actual market divisions the LRR would expect to negotiate with the residual BNSF.[133] This evidence stands unrebutted.

BNSF's cost study procedure is totally flawed – and its study result meaningless – because BNSF mistakenly confuses costs with revenues, and mistakenly applies a cost-based adjustment procedure to arbitrarily calculate reduced new divisions for the LRR.

Third, the Board opined in Duke/NS I that it might consider setting divisions using procedures other than MSP based upon an analysis of "the defendant carrier's relative cost of providing service" over the SARR and non-SARR segment of the

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[132] See e.g., WPL I at 24; FMC at 27 n.62; TMPA I at 31.

[133] See WFA/Basin Op. Exhibits III-A-3 and III-A-4.

involved haul.[134] The Board further opined that to determine the "relative costs" a party would have to calculate variable costs over each segment and fairly allocate fixed costs:

> There may be merit to allocating revenues based on the relative variable cost and average fixed cost to haul traffic over each segment of the move, if those costs can be fairly approximated.

Duke/NS I at 22.

While any "relative cost" test that ignores market conditions is wrong,[135] the Board need not address this issue since BNSF's cost studies do not address, much less provide, a procedure that "allocat[es] revenues based on the relative variable and average fixed cost[s]" to haul the cross-over traffic.

BNSF's cost studies focus solely on BNSF's asserted costs to load and unload unit coal trains. BNSF's studies do not calculate BNSF's overall variable costs for transporting traffic on the SARR route segments, do not calculate BNSF's variable costs for transportation over the SARR route segments, and do not calculate or allocate fixed costs. Also, any useable "relative cost" study would have to factor in the fact that the LRR is a "short haul" carrier that must allocate its variable and fixed costs over

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[134] Id. at 20.

[135] See p. III-A-48 to 67 below.

substantially fewer miles than the residual BNSF since the average LRR cross-over movement is 71.1 miles and average residual BNSF movement is 938.9 miles.[136]

BNSF's evidence falls far short of the "relative cost" study the Board called for in Duke/NS I. The Board should continue to rely on the MSP divisions methodology in this case.

(d) Market Realities

BNSF's avoidable cost and modified MSP approaches produce absurd results when given a real-world reality check. As the Board has observed, the "SAC constraint is meant to serve as a practical tool, not a mere exercise in contestable market theory divorced from its purpose of judging the reasonableness of the defendant carrier's pricing."[137] Similarly, the Board has observed that all SAC assumptions "must be ... consistent with the underling realities of real-world railroading."[138]

BNSF's position, stripped to its core, is that BNSF is barely breaking even on originating PRB coal traffic. Under BNSF's avoidable cost approach, BNSF assumes its PRB revenue equals its variable costs. Under BNSF's modified MSP approach, BNSF assumes its PRB revenues are less than its variable service costs. These conclusions find no support in the reality of real-world railroading.

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[136] See, e.g., FMC at 30 (reciting the fundamental rule of railroad economics "that short originating and terminating movements have higher relative costs").

[137] See AEPCO (STB served Aug. 19, 2002) at 6-7.

[138] See Xcel II at 12.

The PRB is the densest traffic segment on BNSF.[139] The most highly efficient trains in the BNSF system – unit coal trains – traverse the PRB track. The PRB market also is highly lucrative – as is most recently confirmed in a comprehensive study performed by an independent third party.[140] Indeed, the market is so lucrative that a third carrier – the DM&E – has sought, and obtained preliminary STB approval to enter it.[141] Yet, under BNSF's divisions analysis, its PRB traffic barely breaks even and, over time, the PRB coal origination market is not sustainable, because it is not paying anything towards BNSF's fixed system costs. That simply is not right.[142]

If the Board finds that SAC revenues do not substantially exceed SAC cost on the densest portion of the BNSF network, the SAC test will cease to be of use to shippers in any complaint case – which is clearly BNSF's objective.[143] SAC will become a regulatory standard so far removed from the reality of real-world railroading that it will

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[139] American Association of State Highway and Transportation Officials, Transportation – Invest in America, Freight – Rail Bottom Line Report (July 2003) at 117 ("AASHTO Study"). See WFA/Basin Reply electronic workpaper "Freight Rail Report.pdf."

[140] Id.

[141] See Dakota, Minnesota & Eastern R.R. Construction into the Powder River Basin, STB Finance Docket No. 33407 (STB served Jan. 30, 2002).

[142] For example, WRPI – a real world PRB origin carrier – obtained divisions producing average R/VC ratios in the 200% range. See WFA/Basin Rebuttal Workpapers pp. 171-192.

[143] The Board counsel made this very point in PSCo. See Board's Xcel Brief at 36 (observing that BNSF objects to "any application of the SAC test that results in relief to captive shippers").

become a meaningless exercise – and one that will leave captive shippers with no meaningful recourse against monopoly carrier pricing.

(e) Market Divisions

In their opening evidence, WFA/Basin presented substantial evidence demonstrating that WFA/Basin's reliance on MSP produced conservative results when compared to the actual market divisions that LRR would negotiate with the residual BNSF in the marketplace.[144] On Reply, BNSF either ignores this evidence, or presents make-weight criticisms of it. BNSF presents no evidence of its own concerning the level of market-based divisions the LRR would expect to negotiate with the residual BNSF. LRR's Opening market evidence can be summarized under the headings: WRPI divisions; BNSF divisions; and industry practice.

- WRPI Divisions. The LRR is the mirror-image of WRPI. WRPI entered the PRB market in the mid-1980's and negotiated a divisions agreement with its connecting carrier – the UP.[145] WRPI's market-based divisions exceeded those that WRPI would have obtained under MSP.[146] WRPI was able to negotiate favorable market divisions because it – unlike the UP – had direct access to a highly valuable origin

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[144] See WFA/Basin Op. Exhibit III-A-3.

[145] Id. at pp. 3-5.

[146] Id.

franchise – the PRB.[147] The LRR, as a replacement carrier to BNSF for utility coal traffic, possesses the same market power as WRPI, – i.e. it – not the residual BNSF – has direct access to the PRB mines to originate its PRB utility coal traffic.

David Weishaar, WRPI's principal coal marketing officer, has direct personal knowledge of the WRPI/UP divisions agreement and is also familiar with the proposed LRR/residual BNSF traffic arrangements. On Opening, Mr. Weishaar confirmed that from a practical market perspective, the LRR would be able to negotiate divisions at least equal to (if not greater than) MSP divisions.[148]

On Reply, BNSF claims that WFA/Basin "have no supporting data" for the WRPI divisions calculation.[149] That is not correct. WFA/Basin's WRPI evidence is sponsored by Mr. Weishaar. Mr. Weishaar has stated, under oath, that WRPI's divisions exceeded MSP divisions.[150] Confidentiality restrictions precluded Mr. Weishaar from submitting WRPI/UP's actual movement-specific divisions arrangements.[151] However, BNSF does not dispute that Mr. Weishaar was intimately familiar with the WRPI/UP arrangements, nor does BNSF challenge Mr. Weishaar's credibility.

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[147] Id.

[148] Id.

[149] See BNSF Reply Narr. at I-12 n.9.

[150] See WFA/Basin Op. Exhibit III-A-3, pp. 3-5.

[151] Id.

WFA/Basin also introduced publicly available evidence – which BNSF ignores – showing that the WRPI divisions approximated 16.3 mills per ton mile on average hauls of 185 miles. Mr. Weishaar found that the LRR's average divisions, which approximate 20.7 mills per ton mile, are in line with WRPI's, after factoring in the fact that the LRR's average length of haul (71.1 miles) was less than half of WRPI's average length of haul (185 miles).

BNSF also argues that the WRPI/UP divisions are not significant because the WRPI/UP relationship was not "arms length."[152] Mr. Weishaar has reviewed BNSF's assertion and informs the Board that it is wrong. At the time CNW, WRPI and UP entered into their divisions arrangements, CNW/WRPI and UP were separate carriers and engaged in "arms length" bargaining over the terms of the divisions.

WRPI and UP did align themselves closely for marketing purposes since WRPI was UP's only means of accessing the PRB in a manner that would permit UP to compete with BNSF. Mr. Weishaar observes that he would expect the LRR and BNSF also to closely align for marketing purposes because, as BNSF's replacement, the LRR provides BNSF with the only way of accessing the PRB in a manner that would permit BNSF to compete with UP for utility coal traffic movements.

- <u>BNSF Divisions</u>. BNSF produced actual divisions data in discovery.

That data is analyzed in WFA/Basin Op. Exhibit III-A-4. That data shows that on

[152] <u>See</u> BNSF Reply Narr. at I-12.

interline coal movements consisting of a short-haul segment and a long-haul segment, the short-haul carrier earned revenue shares that are comparable to, or higher than, the LRR earns under MSP. The results are summarized in Rebuttal Table III-A-2 below:

Rebuttal Table III-A-2
Comparison of MSP Divisions
to Actual Divisions

Movement Length (Short-Haul Carrier) (1)	Short-Haul Carrier MSP Division $ (2)	Short-Haul Carrier Actual Division (3)	Difference Col. 3 - Col. 2 (4)
1. { }	{ }	{ }	{ }
2. { }	{ }	{ }	{ }
3. { }	{ }	{ }	{ }
4. { }	{ }	{ }	{ }
5. { }	{ }	{ }	{ }
6. { }	{ }	{ }	{ }
7. { }	{ }	{ }	{ }
8. { }	{ }	{ }	{ }
9. { }	{ }	{ }	{ }
10. { }	{ }	{ }	{ }
11. { }	{ }	{ }	{ }
12. { }	{ }	{ }	{ }
13. { }	{ }	{ }	{ }
14. { }	{ }	{ }	{ }
15. { }	{ }	{ }	{ }
16. { }	{ }	{ }	{ }
17. { }	{ }	{ }	{ }
18. { }	{ }	{ }	{ }
19. { }	{ }	{ }	{ }
20. { }	{ }	{ }	{ }
21. { }	{ }	{ }	{ }

On Reply, BNSF presents no evidence to rebut this showing.

- Industry Practice. WFA/Basin also presented evidence on Opening showing that, as matter of industry market practice, short-haul originating or terminating carriers earn divisions that are equal to, or higher than, MSP divisions.[153] Again, BNSF presents no responsive evidence to this well-known industry practice.

(f) Relevance of Market Divisions

BNSF apparently chose to ignore WFA/Basin's market evidence based upon its reading of recent STB precedents – particularly Duke/NS.[154] WFA/Basin review the applicable precedents below and, in light of this review, request that the Board revisit its Duke/NS rulings concerning the relevance of market factors in determining SAC divisions.

In the ICC's seminal Nevada Power II decision, the ICC ruled that cross-over traffic divisions should be allocated on the basis of market principles. Id. at 268. This ruling was explained in detail in ICC Chairman McDonald's comment accompanying the decision:

> A third generic issue settled by this decision is how to estimate the *revenue* that a SARR would earn on cross-over traffic. Because this traffic is not currently interlined, there are no actual revenue shares, or "divisions" data, available. We find that the

[153] See WFA/Basin Op. Exhibit III-A-3, pp. 5-6.

[154] See Duke/NS I at 20.

> proper approach is to estimate what the *market-based* divisions would be, and this will be the standard for future cases.
>
> We use here a mileage proration *method* for estimating market-based divisions. That is, the SARR's share of the total revenue is set equal to its share of the total mileage. However, I view our acceptance of that particular method to be a case-specific finding. Based on the specific evidence of record and our informed judgment about the workings of rail markets, we find that mileage-based revenue divisions offer a reasonable approximation in this case to the market-based divisions that would be available to the SARR.
>
> Market-based divisions result from the interaction of supply considerations (the relative costs incurred by the carriers in providing the interline movement) and demand considerations (the relative bargaining power of the two carriers)....

Id. at 280.

The ICC and the STB adhered to this Nevada Power market-based divisions rule in all subsequent SAC decisions until Duke/NS. See, e.g., FMC at 31; TMPA at 31. The rule was also universally supported by both carriers and shippers alike as the proper standard for the Board to apply in SAC cases. For example, in FMC, UP's principal revenue witness testified that "[i]n the 'contestable' world, what should determine divisions is relative costs and general market place tendencies."[155]

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[155] See FMC Corp. v. Union Pacific R.R., UP Reply Evidence, Verified Statement of Richard B. Peterson (filed March 31, 1999) at 19, WFA/Basin Op. electronic workpaper "III-A-Peterson wp."

The Board abruptly reversed course in Duke/NS. In that case, Duke's proposed SARR provided origin service for many eastern coal origins NS served.[156] NS argued that on many of the movements NS was the sole destination carrier; that it exerted bottleneck pricing power over these shipments (because the destination shippers could source their coal from origin mines served by NS or other carriers); and that, as a result, NS would use its bottleneck market power to negotiate SARR's divisions on cross-over traffic "down close to variable cost levels." Id. at 18.

In its Duke/NS I decision, the Board presented a hypothetical where the residual incumbent exerts bottleneck pricing power over a SARR cross-over traffic movement. The Board appeared to agree with NS's divisions analysis – i.e., that NS could drive down the SARR's divisions on the cross-over traffic to levels close to variable costs. The result, the Board postulated, would require the complainant shipper to "bear most of the fixed costs" of the SARR facilities, thus "depriv[ing] [the complainant] shipper of the benefit of grouping traffic (i.e., realizing the economics of scale, scope and density)." Id. at 19. The Board went on to hold that, as a result, marketplace divisions have "no place in a SAC analysis:"

> Thus, a debate over how much of the revenues from cross-over traffic the hypothetical carrier could negotiate with the residual defendant has no place in a SAC analysis. (Indeed, the defendant carrier does not

[156] See Duke/NS I at 42-43.

> negotiate with itself as to whether one segment of its line should be allocated a larger share of the revenues from a movement than another segment of its own line.) Rather, the revenue allocation issue should reflect, to the extent practicable, the defendant carrier's relative costs of providing service over the two segments.

Id. at 19-20 (footnote omitted).

The Board also observed that NS refused to provide actual divisions data, but concluded such production would not be particularly instructive:

> Nor would information about NS's actual divisions with other carriers (which Duke requested in discovery but did not receive) be particularly instructive, as those divisions presumably reflect a wide range of commercial considerations across a broad spectrum of traffic and gateways.

Id. at 20 n.29. WFA/Basin respectfully submit that the Board's Duke/NS decision to eliminate consideration of marketplace decisions was wrong for a number of interrelated reasons:

First, the Board in Duke/NS did not address – much less attempt to distinguish – the long line of ICC and STB cases holding that cross-over traffic divisions should be set using "market-based" divisions. The Board's failure to acknowledge these longstanding precedents, and to explain why the rulings set forth therein were incorrect, violates basic principles of administrative adjudication.[157]

Second, the Board's decision ignored the fact that the SARR is a replacement for the incumbent. As a replacement carrier, the SARR would necessarily negotiate divisions with the residual incumbent. As the ICC has observed, "[d]ivisions agreements are arrangements between connecting railroad companies determining how the carriers will divide the revenues received from multiple–carrier ... movements."[158]

Third, the Board's ruling in Duke/NS I established an impermissible barrier to entry. The SAC test is predicated upon the modeling of a SARR that faces no barriers to entry. For SAC purposes a barrier to entry consists of "any type of cost that a new entrant would have to incur that was not actually incurred by the defendant carrier." TMPA II at 23. "Entry barriers can take the form of any friction that would slow entry into the industry and uncommitantly increase the cost of entry." WTU 1 S.T.B. at 657 n.37.

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157 See Burlington N. & Santa Fe Ry. Co. v. STB, 403 F.3d 771, 778 (D.C. Cir. 2005) (remanding a decision to the STB because the agency "overlooked binding precedent"); New York Cross Harbor R.R. v. STB, 374 F.3d 1177, 1188 (D.C. Cir. 2004) (finding that the Board acted arbitrarily and capriciously when it failed to distinguish contrary precedent); Borough of Columbia v. STB, 342 F.3d 222, 229 (3rd Cir. 2003) (stating that if an agency departs from precedent without a "reasoned explanation" the court may find that the agency acted arbitrarily and capriciously).

158 See Official – Southwest Divisions via Southern Freight Territory, ICC Docket No. 25390 (ICC decided July 6, 1990) at 1990 WL 288358*1.

In a SAC case, the SARR must evaluate whether to enter a particular market. When a SARR will carry cross-over traffic, the SARR must evaluate what its revenue division will be with the residual incumbent. The evaluation will necessarily focus on both market and cost factors. A SARR cannot – and will not – enter a market where it cannot recover its costs. And, in order to determine whether it can recover its costs, a SARR must evaluate its ability to negotiate a division with the residual incumbent that allows it to recover its costs. This is a market-driven analysis.

Similarly, when BNSF (or any other carrier) evaluates its decision to enter into a new market, it must look at its anticipated costs and anticipated revenues. When the new market involves joint line transportation, the carrier must evaluate its ability to negotiate necessary divisions. This, of course, is also a market-driven exercise.

Setting a SARR's divisions on cross-over traffic using a formula based on the residual carrier's costs can – and does – impose entry constraints that the residual carrier did not incur. For example, when BNSF was making decisions to enter into the PRB market, or to expand its PRB market capabilities, it was not required (and certainly did not) project revenue divisions based upon the cost structure of its connecting carriers. Instead, it evaluated its market position, and leverage, vis-a-vis its connections.

Fourth, the Board's decision violated the basic SAC rule that a new entrant must be able to utilize the "same productive techniques" as the incumbent. See Nevada Power I, 6 I.C.C.2d at 45. BNSF – and all other real world carriers – negotiate divisions using market leverage as a "productive technique." The Board's cost-based divisions measures strip the LRR of the market-based divisions techniques utilized every day by BNSF and other rail carriers.

The Board's SAC rules are grounded in the first principles of contestability theory. As stated in Contestable Markets:

> Entrants are expected to calculate the profits that entry can bring them.... In all of these [contestability] models, entry is assumed to be free in the sense that the act exerts no explicit costs and that entrants suffer no disadvantages in the techniques available to them.

Id. at 4. A SARR looking to enter a market is perfectly free under contestability standards to serve whatever market it so chooses and to use the productive techniques available to the incumbent. Here, the LRR has chosen to enter into a market (the PRB-to-LRS market) and can use the same productive techniques used by the incumbent – i.e., interline traffic and negotiate market-based divisions.

Fifth, the Board's analysis in Duke/NS I was predicated upon a circular, outcome-determinative analysis. In Duke/NS I, the Board assumed that all SAC cases involve bottleneck transportation and that, in the real world, bottleneck carriers always negotiate very favorable (for them) divisions. As WFA/Basin demonstrated in their opening evidence, this fact pattern has no application in the present case because the LRR cross-over traffic movements involve a multitude of different traffic patterns.[159] WFA/Basin also demonstrated in their opening evidence that the LRR would have substantial market leverage in negotiating divisions with the residual BNSF – a fact that BNSF does not dispute in its reply filing.

Sixth, the Duke/NS I determination produces theoretical inconsistencies in the Board's SAC analysis. In prior SAC cases, the ICC and the STB have always relied on market-based SARR rates. For example, if a SARR replaces the incumbent's service for origin-to-destination traffic, the Board assumes SARR rates equal the incumbent's rates – rates that are typically set by market forces on competitive traffic.[160] Similarly, if a SARR replaces the incumbent's service from origin-to-interchange with a third carrier, the Board assumes the SARR division equals the incumbent carrier's actual division – again a division typically set by market forces.[161]

It produces fundamentally inconsistent results to set SARR revenues on through moves, and on most interchange moves, using market-based rates, and then turn-around and ignore market forces in setting divisions on cross-over traffic. This inconsistency is highlighted by BNSF's evidence in this case. In its SAC analysis, BNSF assumes the LRR earns a market rate on the single line LRS movements. BNSF

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[159] See WFA/Basin Op. Exhibit III-A-3, pp. 8-9.

[160] See, e.g., CPL at 19; Duke/NS I at 64; TMPA I at 27; WPL I at 24.

[161] See Nevada Power II at 268.

calculates that rate in 2005 as averaging { } per ton (exclusive of the fuel surcharge).[162] If, however, the single line rate was a cross-over movement, BNSF would calculate the avoidable cost division at { } per ton[163] – a result that has no correlation whatsoever to the market.

Seventh, BNSF itself concedes that contestability theory calls for the establishment of SARR divisions using market principles. BNSF posits a situation where the SARR and incumbent compete for the SARR business, with the resulting division set based upon the assumed results of the market competition.[164]

BNSF's assumption that a SARR and the incumbent engage in pre-entry price competition is wrong for the reasons set forth above. A SARR is properly seen as a replacement for the incumbent. However, as a replacement carrier, the SARR would need to negotiate divisions with the residual incumbent -- and those negotiations would necessarily reflect the market positions of both the SARR and the incumbent.

Eighth, the Board postulated in Duke/NS I that actual divisions data would not "be particularly instructive, as those divisions presumably reflect a wide range of commercial considerations across a broad spectrum of traffic and gateways."[165] This

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[162] See BNSF Reply Errata electronic workpaper "LRR Traffic and Revenue _ WFA/Basin Opening__BNSF Revised.xls."

[163] See WFA/Basin Rebuttal electronic workpaper "BNSF 2005 Variable Cost.xls."

[164] See BNSF Reply Narr. at III.A-36.

[165] Duke/NS II at 20 n.29.

statement is true if the referenced actual divisions data refers to the totality of railroads' system-wide divisions. However, the system divisions data can be broken down to find comparable market division data. That is exactly what WFA/Basin have done in this case.[166]

Ninth, WFA/Basin's approach is also consistent with regulatory practice. The STB has statutory authority to set divisions on joint rates in cases where the parties cannot agree.[167] The ICC, the STB's predecessor, had the same authority and exercised it frequently over the years. In exercising its authority, the ICC routinely would consider evidence of divisions set under comparable market circumstances.[168] As observed by one court:

> A validly established and currently applied basis of divisions of revenue derived from similar traffic moving in the same or adjacent territory under similar circumstances may property be considered [in prescribing divisions][[169]]

Conversely, the ICC did not prescribe divisions based solely on the "relative costs" of the involved carriers. As observed by the Supreme Court: "[r]elative cost of

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[166] See WFA/Basin Op. Narr. at III-A-17 n.28.

[167] See 49 U.S.C. § 10705.

[168] See Rates on Lumber and other Forest Products from Points in Arkansas, 31 I.C.C. 673, 676 (1914).

[169] Boston and Maine R.R. v. United States, 208 F.Supp. 661, 677 (D.Mass 1962).

service is not the only factor to be considered in determining just divisions."[170] As summarized by the ICC:

> There is no single yardstick or criterion which can be employed in determining fair divisions. *Baltimore & O.R. Co. v. United States*, 298 U.S. 349, 359. The question of what constitutes just and reasonable divisions involves the making of practical judgments and cannot be solved as though it were a mathematical problem. *Boston & Maine R.R. v. United States,* 208 F. Supp. 661, 675.[171]

Last, the Board's ruling arbitrarily departs from the Board's waybill sample procedures. These procedures, as described above, are intended to produce accurate forecasts of market divisions.

In Duke/NS I, the Board takes a method it utilizes to determine market-based divisions (MMP) and attempts to convert it into a method for determining "fair[]" cost-based divisions. However, MMP is not – and never was – intended to determine "fair" divisions between carriers based on relative service costs. Instead, it is a Board-approved method for determining actual market-based divisions. There is no principled way to turn a market-based division estimate method into a cost based division method.

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[170] United States v. Abilene & S. Ry., 265 U.S. 274, 284 (1924).

[171] Akron, Canton & Youngstown R.R. v. Atchison, Topeka & Santa Fe Ry., 322 I.C.C. 491, 499 (1963).

For these reasons, WFA/Basin respectfully request the Board to reconsider its ruling in Duke/NS I and to return to the Nevada Power rulings made by the ICC and the Board prior to Duke/NS I – i.e., SARR divisions should be set using market principles.

(d) Other

i. Cross-Subsidy

BNSF throws in a bogus cross-subsidy claim at the tail end of its excessively long discussion of SAC traffic group issues.[172] BNSF devotes little discussion to its cross-subsidy claim – and with good reason. The LRR contains no cross-subsidies.

BNSF's cross-subsidy contentions focus on LRR traffic movements that originate from northern PRB mines and interchange with the residual BNSF at Donkey Creek and Campbell. BNSF claims that the LRR revenues for this traffic (using WFA/Basin's revenue projections) exceed the SAC costs for this segment of the LRR. This overage, BNSF opines, "makes it virtually certain that these revenues are being used to subsidize the LRR facilities south of Donkey Creek."[173] BNSF goes on to propose a

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[172] See BNSF Reply Narr. at III.A-63 to 66.

[173] Id. at III.A-64.

complex methodology to eliminate the cross-subsidy – a methodology that substantially reduces the LRR's revenues.[174]

BNSF's analysis assumes that a "cross subsidy" occurs when SARR revenues for a SARR segment exceed the SARR costs. BNSF made exactly the same argument in PPL, and the Board properly rejected it:

> In examining whether the hypothesized [PPL SARR] incorporates a proscribed cross-subsidy, the appropriate inquiry is not, as BNSF suggests, whether a particular subset of traffic is generating revenues in excess of the SAC associated with serving that subset of traffic, but whether there is a readily identifiable subset of traffic that would not cover the collective attributable costs associated with serving the traffic.

PPL at 9-10 (footnote omitted).

The Board further observed that if BNSF's proposed cross-subsidy test was accepted, SAC would not work:

> BNSF's proposed standard for limiting the revenue contribution from cross-over traffic in excess of SAC would make it unlikely that a shipper could prevail on a complaint in which the SAC analysis relied extensively on cross-over traffic. Under BNSF's approach, revenues from cross-over traffic could never exceed SAC but, in order to show that a rate is unreasonable, a shipper must demonstrate that revenues from all movements in its traffic group in fact exceed

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[174] Id. at III.A-64 to 66.

> SAC. While it is unnecessary in this proceeding to reach the issue of the reasonableness of the revenue divisions proposed by PPL, we reject BNSF's revenue restriction on cross-over traffic as it could very well eliminate the usefulness of including cross-over traffic in a SAC analysis.

Id. at 10 n.19.

The Board held in PPL that the proper SARR cross-subsidy inquiry is whether "there is a readily identifiable subset of traffic that would not cover the collective attributable costs associated with serving the traffic." Id. at 10. This definition of cross-subsidy parallels the definition provided in the Guidelines, 1 I.C.C.2d at 553 (defining cross subsidy as "[a] situation where losses from service with rates below economic costs are recouped by rates in excess of full economic costs for other services").

BNSF does not cite, or refer to, the Board's PPL cross-subsidy test because it clearly cannot meet it. To prove a cross subsidy, BNSF has to demonstrate that an identifiable subset of the LRR traffic is earning revenues less than "the collective attributable costs associated with serving the traffic."[175] BNSF has made no attempt to make such showing in this case because no such traffic subset exists.

Also, as a practical matter, cross-subsidy, under the Board's definition, comes into play where SARR segments have significantly different densities. For

[175] PPL at 10.

example, in PPL, the STB divided the PPL SARR into a high density north-south line (consisting of the BNSF's main PRB lines) and a low density east-west line.[176]

Here, the LRR's PRB lines have high densities throughout[177] and BNSF's cross-subsidy analysis is predicated on the LRR line segment north of Donkey Creek subsidizing the LRR line segment south of Donkey Creek. As between these two high density segments, the northern segment moves less traffic (and has lower traffic densities) than the southern segments.[178] Thus, in BNSF's backwards mind-set, a lower density segment is cross-subsidizing a higher density segment – a result that makes no sense.

Finally, a substantial portion of the LRS traffic currently originates at PRB mines north of Donkey Creek.[179] This traffic is moved over the BNSF lines north of Donkey Creek. Thus, the LRR traffic is currently sharing facilities with northern PRB traffic included in the LRR SARR.

ii. Sponsoring Witnesses

BNSF makes repeated references to "Dr. Kalt's" sponsorship of its misguided SARR revenue theories. WFA/Basin's revenue, and rate relief, evidence is co-sponsored in part by two of the most respected transportation economists in the nation,

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[176] Id. at 7.

[177] See WFA/Basin Opening electronic workpaper "LRR Annual Statistics.xls."

[178] Id.

[179] See WFA/Basin Rebuttal electronic workpaper "LRR Traffic and Revenues_WFABasinRebuttal.xls."

Dr. Curtis M. Grimm, Dean's Professor of Supply Chain and Strategy, at the University of Maryland's Robert H. Smith School of Business and Dr. George H. Borts, Professor of Economics, Brown University.

iii. Revenue Results

WFA/Basin's Rebuttal LRR revenue calculations are summarized in Rebuttal Table III-A-3, below. These calculations incorporate the changes to LRR's opening revenue calculations discussed above.

Table III-A-3
LRR System Revenues

Period	Revenues (Millions)
4Q 2004	$ 76.6
2005	329.3
2006	339.4
2007	347.1
2008	354.7
2009	368.6
2010	376.6
2011	385.4
2012	394.1
2013	402.4
2014	409.8
2015	419.5
2016	427.3
2017	436.0
2018	446.3
2019	460.8
2020	471.5
2021	482.8
2022	496.2
2023	512.8
1Q-3Q 2024	397.2

III-B Stand-Alone
Railroad System

III. B. STAND-ALONE RAILROAD SYSTEM

There is very little disagreement between WFA/Basin and BNSF with respect to the LRR's system configuration. The LRR system lies entirely in northeastern Wyoming. Its main line extends from Donkey Creek on the north to Guernsey on the south, with branches extending from Donkey Creek to Eagle Butte Jct. (Campbell Branch), Reno to Jacobs Jct. (Reno Branch), and Wendover to Moba Jct. (Moba Branch). Yards are located at Donkey Creek, South Logan and Guernsey. Interchanges with BNSF are located at Campbell, Donkey Creek, Orin Jct., Guernsey and Moba Jct. All of the LRR's lines (both main lines and the three branches) are equipped with a CTC traffic control system with power switches, and the LRS has a microwave/radio communications system. All of these system parameters have been accepted by BNSF.

Like WFA/Basin, BNSF simulated the LRR's configuration and peak-period operations (as presented by WFA/Basin on Opening) using the RTC Model. Although BNSF changed some of WFA/Basin's RTC Model inputs in a manner that put additional burdens on the system, BNSF's simulation none-the-less confirmed that the LRR system as configured by WFA/Basin enables the SARR to handle its entire traffic group (including the traffic that does not move south of Donkey Creek/Campbell) with faster round-trip train cycle times than BNSF's 2004 real-world cycle times.

There are a few minor disagreements between the parties with respect to the LRR's route miles and track miles. These disagreements are discussed below.

1. Route Miles

In their opening evidence WFA/Basin determined that the LRR has 217.92 route miles. WFA/Basin Op. Narr. at III-B-3 to 4. In its reply evidence BNSF accepted the LRR's route as proposed by WFA/Basin but calculated a total of 219.53 route miles. BNSF Reply at III.B-1 to 4. Thus the parties' route-mile calculations differ by 1.61 miles.

The route-mile additions proposed by BNSF include the following:

i. Add 1.24 miles to the Reno Branch representing one-half of the length of a second southerly wye leg at Nacco Jct. (i.e., a second southerly mine lead to the North Antelope/Rochelle Mine), which in the real world is jointly owned by BNSF and UP.

ii. Add 0.16 mile to the Campbell Branch representing the BNSF-owned portion of the Fort Union Mine lead track.

iii. Add 0.03 miles to the Moba Branch representing the length of BNSF-owned track from Moba Jct. to the clearance point for the spur to the LRS power plant.

iv. Add 0.18 miles to the Campbell Branch representing additional length for the west leg of the wye at Campbell.

WFA/Basin agree with the addition of 0.03 miles to the Moba Branch (Item iii). They disagree with the additions described in Items i, ii and iv. Accordingly, the LRR's route miles should have been increased by 0.03 miles, from the 217.92 miles reflected in WFA/Basin's opening evidence to 217.95 miles. The additional construction cost for this 0.03 mile of track has been added to the LRR road property investment costs described in Part III-F below.

a. <u>Second South Lead to North Antelope/Rochelle Mine</u>

The LRR has no need for a second southerly lead track extending from the Orin Subdivision main line toward the North Antelope/Rochelle Mine. That track exists in the real world because both BNSF and UP serve North Antelope/Rochelle from the south, and UP coal trains need to be accommodated as well as BNSF coal trains. However, the LRR is replicating only BNSF lines and BNSF service to North Antelope/Rochelle. The RTC Model simulation performed by WFA/Basin indicated that the LRR does not need two southerly leads to this mine, which is why WFA/Basin have provided only one southerly lead or wye track at Nacco Jct. <u>See</u> WFA/Basin Op. Exhibit III-B-2, page 5. BNSF's own RTC Model simulation confirms this, as BNSF did not include the second southerly wye lead in its simulation.[1]

According to BNSF, the railroad-owned portion of the additional southerly North Antelope/Rochelle mine lead is 2.48 miles long, and is owned jointly by BNSF and UP. BNSF Reply Narr. at III.B-2. BNSF proposes to add 1.24 miles to the LRR route because this is half the length of the jointly owned track in issue. <u>Id.</u> Conceptually, however, this track is no different than any other railroad-owned lead track extending from the jointly owned portion of the Orin and Reno Subdivisions (the so-called "Joint

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[1] <u>See</u> BNSF Reply Narr. at III.B-46 n.97 ("Mr. Wheeler coded his RTC Model simulation to bring trains using this second lead in and out of the mine at a point above the lead. Therefore, it was not necessary to physically build the second lead for the RTC Model simulation.")

Line") to a jointly served mine. If the lead track is needed by the LRR to accommodate the BNSF coal traffic included in its traffic group, then the LRR must construct and pay for the entire track since it has chosen to construct the trackage needed to serve these mines rather than stepping into BNSF's shoes as a one-half owner of the Joint Line under the applicable BNSF/UP joint facility agreement.

In any event, the fact is that both parties have excluded the entire southerly North Antelope/Rochelle mine lead track from their RTC simulations and therefore agree this track is not needed to accommodate the LRR's coal traffic. It is therefore unnecessary to include any portion of it in the LRR's route and track miles.

b. Fort Union Mine Lead

The LRR's traffic group does not include any coal traffic that originates at Fort Union Mine during the entire 20-year DCF period. Accordingly, the LRR does not need either a turnout or any track leading to this mine. Although WFA/Basin correctly excluded the BNSF-owned portion of the Fort Union mine lead from the LRR's system configuration, they inadvertently and incorrectly included a turnout from the Campbell Branch main track for this mine lead in their configuration of the Campbell Branch. See WFA/Basin Op. Exhibit III-B-2, page 1. This error has been corrected and the turnout has been removed on Rebuttal. See WFA/Basin Rebuttal Exhibit III-B-1, page 1.

c. **West Leg of Campbell Wye**

BNSF notes that WFA/Basin included 0.45 miles for the east leg of the Campbell Branch wye track but only 0.27 miles for the west leg, and "gave no explanation for the difference in the length of the east and west legs of the wye." BNSF Reply Narr. at III.B-2 to 3. Because "[t]he curves of the east and west legs of the wye are similar," BNSF added 0.18 miles to the west leg to make both legs the same length.

WFA/Basin's Opening exhibits and workpapers show how the 0.27-mile length for the west wye leg was determined. First, the portion of the Campbell Branch south of Milepost 2.11 is comprised of two main tracks, which represent the two wye legs. See WFA/Basin Op. Exhibit III-B-2, page 1 and the "Eagle Butte Mine track schematic" provided by BNSF in discovery and included in WFA/Basin Op. Workpapers Vol. 6, p. 03895. The Eagle Butte Mine track schematic shows the lengths of the two wye legs. The east wye leg is comprised of segments G – E (8,077 feet) and E – A (3,067 feet), for a total of 11,144 feet or 2.11 miles. The west wye leg is comprised of segments G – F (7,677 feet) and F – C (2,514 feet), for a total of 10,191 feet or 1.93 miles. BNSF's Reply workpapers indicate the two tracks parallel each other for 1.66 miles.[2] The remainders are 0.45 miles for the east wye leg and 0.27 miles for the west wye leg. (The

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[2] See the spreadsheet "III F Route Miles.xls" contained in BNSF's III-F electronic workpaper folder. Line 7, Column 7 displays the 1.66 miles and footnote 1 explains that it is double track. The 0.45-mile east wye leg, which is part of the main line, is shown on Line 8, Column 7. The improper extension the west wye leg to 0.45 miles is shown on Line 8, Column 8.

difference between these numbers is 0.18 mile.) Thus, WFA/Basin's 0.27-mile length for the west wye leg is correct because it is based on specific information provided by BNSF in discovery and in its Reply workpapers.

2. Track Miles and Weight of Track

In this case, for the first time, the defendant has accepted the complainant's proposed SARR system track configuration. This includes the mainline and branch line track configuration, the track configuration at all interchange points, and the basic track configuration for all of the SARR's yards. There are, however, a few minor discrepancies between the parties' track mile calculations.

According to WFA/Basin's opening evidence the LRR has 446.51 track miles. In its reply evidence BNSF increased the LRR's track miles to 462.53, producing a difference between the parties' calculations of 15.72 track miles. See BNSF Reply Narr. at III.B-4 to 6 and Table III.B-2. The difference is accounted for by the following:

i. Route-mile differences, which reflect a total of 1.43 track miles.

ii. A discrepancy of 0.02 miles in the parties' calculation of total main track miles.

iii. A difference of 13.59 miles for setout tracks, due to differences in FED setout track length and BNSF's addition of new setout tracks at the Dragging Equipment Detectors ("DEDs") which BNSF proposes to add due to its conversion from wood to concrete ties.

iv. BNSF's addition of 0.68 miles of track at Guernsey Yard for holding locomotives prior to entering and after leaving the Guernsey locomotive shop.

a. **<u>Main Track Miles</u>**

As noted above, BNSF has accepted WFA/Basin's main line and branch line track configuration for the LRR, including the locations of multiple main tracks, crossovers and passing sidings. The only difference asserted by BNSF in the parties' calculation of main track miles is a 0.02 mile discrepancy which BNSF "found. . . when it replicated WFA/Basin's mainline." BNSF Reply Narr. at III.B-5. The 0.02 mile discrepancy does not, in fact, exist because BNSF appears to have erred in calculating the length of the second main track ("Main 2") between East Donkey Creek and Donkey Creek.

Both parties' track diagrams for the portion of the LRR between East Donkey Creek (the easterly end of the portion of BNSF's Black Hills Subdivision replicated by the LRR) and Donkey Creek (the point where the Orin Subdivision connects with the Black Hills Subdivision) show Main 2 as extending from MP 583.95 to MP 586.38. <u>See</u> BNSF Reply Exhibit III.B-1, page 2. However, BNSF's track mile spreadsheet incorrectly uses MP 586.40 as the end of the second main track, rather than MP 586.38. <u>See</u> BNSF Reply electronic workpaper "III F LRR Construction.xls," tab "Segmentation," cell I16.[3] Thus BNSF appears to have improperly added the 0.02 miles between MP 586.38 and MP 586.40 in calculating the track miles for Main 2.

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[3] As shown on both parties' track diagrams, Main 1 connects with the Orin Subdivision at MP 586.40, but Main 2 does not – the Orin Sub begins at MP 586.38 for Main 2.

Further with respect to main track miles, on Opening WFA/Basin inadvertently overstated the LRR's track miles by 0.18 mile. This overstatement was caused by adding the same 0.18 mile of track to the west wye leg at Campbell that BNSF proposed to add to the LRR's route miles (see Part III-B-1-c above). Correction of this error reduces the LRR's main track miles from 386.35 to 386.17.[4]

BNSF made one additional minor change to the LRR's main track configuration that does not affect track miles. This is the addition of a crossover between the two main tracks at MP 14.20/14.25 on the Orin Subdivision. The additional crossover is shown in BNSF Reply Exhibit III.B-1, page 4A. This crossover was included in the LRR track configuration used for WFA/Basin's Opening RTC Model simulation, but it was inadvertently excluded from the Opening track diagrams and thus from the LRR's road property investment costs. WFA/Basin have corrected this error in their Rebuttal track diagrams (Rebuttal Exhibit III-B-1) and restatement of the LRR's road property investment costs.

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[4] As described in Part III-B-1-c above, the Campbell Subdivision has two main tracks between MP 0.45 and MP 2.11, a distance of 1.66 miles. The east wye leg extends 0.45 miles from MP 0.45 to MP 0.00. However, the west wye leg extends only 0.27 miles, to join the main line at MP 588.6 (see WFA/Basin Op. electronic workpaper "LRR Route Miles.xls," Lines 7 and 8, Columns 7 and 8). WFA/Basin Op. electronic workpaper "Rail Worksheet.xls," tab "Rail Type by Subdivision," line 4 shows the track miles for the westerly main track and westerly wye leg as extending 2.11 miles from MP 2.11 to MP 0.00. This is incorrect; line 4 should show MP 2.11 to MP 0.45, i.e., the 1.66 miles of double track referenced in Part III-B-1-c. Line 6, which currently shows 0 miles, should show the 0.27 miles for the west leg of the wye, i.e., MP 0.27 to MP 0.00.

b. Mine Spurs

The only differences between the parties' calculations of "mine spur" track miles are accounted for by the route-mile differences described in Part III-B-1 above. In this regard, WFA/Basin note that BNSF's Table III.B-2 (BNSF Reply Narr. at III.B-6) shows a difference for mine spurs of 1.43 track miles. This includes the addition of 1.24 miles for the second southerly wye leg at Nacco Jct., 0.16 mile for the Fort Union mine lead, and 0.03 miles representing BNSF ownership of a small segment of the spur to LRS at Moba Jct. As explained in Part III-B-1, WFA/Basin agree only with the addition of 0.03 track miles at Moba Jct.

c. Set-Out Tracks

According to BNSF's Table III.B-2, WFA/Basin included a total of 14.90 miles of setout tracks. In fact, however, this number includes 9.8 miles of interchange tracks (which BNSF has accepted) and 5.10 miles of setout and helper pocket tracks. See WFA/Basin Op. Narr. at III-B-6 (Table III-B-2) and Op. electronic workpaper "Track Miles Worksheet.xls." BNSF included a total of 28.49 miles of "Set-Out Track" which included the same categories of track. The difference of 13.59 miles relates entirely to setout tracks, as BNSF has accepted WFA/Basin's interchange and helper pocket tracks.[5]

There are two categories of difference between WFA/Basin and BNSF with respect to setout tracks. The first involves differences in the lengths of the setout tracks

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[5] See BNSF Reply Narr. at III.B-48.

on each side of the LRR's FEDs. The second involves BNSF's proposal to add DEDs with setout tracks every five miles because of its change from wood to concrete ties.

i. FED Setout Tracks

WFA/Basin provided two 860-foot, double-ended setout tracks at each FED location (one on either side of the FED). In double-track areas one FED with two setout tracks has been provided for each main track.

BNSF has changed the LRR's FED setout tracks in two respects. First, BNSF extended one setout track at each FED location from 860 to 925 feet, which it asserts is necessary to provide 600 feet in the clear. Second, BNSF extended the other setout track at each FED location from 860 to 2,000 feet to provide additional room to store work-train equipment. See BNSF Reply Narr. at III.B-5 and III.F-117 to 119. Neither change is justified.

860-foot vs. 925-foot setout tracks. As BNSF points out (id. at III.F-117), in their Opening Narrative WFA/Basin indicated that the setout tracks are "860 in length between switches." The 860 feet was actually measured between PITOs for No. 10 turnouts, as WFA/Basin explained in response to a BNSF request for additional opening evidence workpapers.[6] BNSF's justification for changing the basic FED setout track length from 860 to 925 feet is that the length should be measured between the switch

[6] See WFA Rebuttal Workpapers pp. 00194-195. "PITO" is an acronym for Point of Intersection of Turnout, which is the point where the centerlines of the two tracks in the turnout intersect.

points at each end of the track, not between the PITOs at each end of the track. According to BNSF, in order to provide 600 feet between clearance points a total of 162.48 feet are required between the switch point and the clearance point at each end of the track, rather than 130 feet as provided by WFA/Basin (the distance between the PITO and the clearance point at each end of the track). This results in a total track length of 925 feet (162.48 + 600 + 162.48) rather than 860 feet (130 + 600 + 130). Id. at III.F-117 to 118.

It is true that a No. 10 turnout has approximately 32.48 feet between the PITO and the switch point (i.e., the difference between 162.48 feet and 130 feet), but this distance is already accounted for in the turnout itself. The LRR is of course purchasing and installing the turnouts, and the cost of each turnout includes the additional footage between the PITO and the switch point. In other words, the turnouts at both ends of these setout tracks already include the difference between WFA's 860 feet and BNSF's 925 feet. By extending the length of the setout tracks by an additional 65 feet (32.48 feet at each end), BNSF is effectively proposing that the LRR pay for the track through the turnout twice. This is inappropriate.

Extension of one setout track at each FED location to 2,000 feet. BNSF also proposes to extend one of the two setout tracks at each FED location from 860 feet to 2,000 feet in length, in order to provide an additional 1,400 feet to accommodate work equipment. BNSF Reply Narr. at III.F-118. BNSF's purported justification for this is that the LRR's FED setout tracks have the dual purpose of accommodating both occasional bad-order cars and the temporary storage of work equipment.

BNSF's proposal is unwarranted. The LRR has a total of eight FED locations, or one approximately every 25 miles (excluding the Campbell and Reno Branches which do not have FEDs). Five of these locations are in multiple-track territory, which means there are two FEDs and four setout tracks, each with 600 feet of clearance, at each of these locations. The remaining three FED locations are in single-track territory. One of these locations has one FED and two setout tracks. The remaining locations are both near the beginning of double-track on one side of the FED, so these locations have three FED setout tracks, one on single track and two on double track. Thus the LRR has a total of 28 FED setout tracks. This provides plenty of storage space for the occasional bad-order car, the LRR's work equipment, and contractor work equipment other than rail and ballast trains (the latter are used only for scheduled, program maintenance).

In addition, to the FED setout tracks, WFA/Basin's operating and engineering experts have provided separate 1,000-foot work equipment storage tracks at four locations (Donkey Creek, South Logan, Wendover and Guernsey).[7] BNSF fails to

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[7] See WFA/Basin Op. Narrative at III-B-9 and Op. Exhibit III-B-2. BNSF has accepted both the locations and the 1,000-foot length of these tracks (BNSF Reply Narr. at III.B-48), which conflicts with BNSF's unsupported assertion that 1,400 feet are needed to accommodate some work equipment.

mention these tracks. Work equipment also can be temporarily stored at a fifth location, Orin Jct., where WFA/Basin have provided three tracks for interchanging coal trains with BNSF.[8] The RTC simulations show that during the LRR's peak traffic week in 2024, a total of nine trains (five empty and four loaded) are interchanged with BNSF at Orin Jct., or an average of less than 1.3 trains per day total in both directions. No more than two trains arrive at the Orin Jct. interchange on any one day during the peak week, and there is no occasion when more than one train is present on the interchange tracks. No program maintenance is performed during the peak week, but even in that week one of the three interchange tracks at Orin Jct. would always be available if a ballast or rail train (for example) needs to be stored overnight at a location between South Logan and Wendover, where there are dedicated MOW equipment storage tracks. For a railroad that has less than 220 route miles, these five locations (Donkey Creek, South Logan, Orin Jct., Wendover and Guernsey) are ample to accommodate the temporary storage of the longer work trains such as rail and ballast trains.

In the Xcel case, the complainant proposed to equip its SARR with 600-foot stub-end setout tracks at each FED location, with no other trackage provided for MOW equipment. BNSF proposed additional setout trackage, which the Board accepted without discussion because it used BNSF's operating and MOW plans rather than the

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[8] See WFA/Basin Op. Exhibit III-B-2, page 5. The trains interchanged at Orin Jct. move to and from the Dave Johnston power plant near Glenrock, WY.

complainant's operating and MOW plans. Xcel I at 49. In this case, WFA/Basin have provided two longer (860-foot) setout tracks that are double-ended rather than stub-ended at each FED location, plus four additional 1,000-foot MOW equipment storage tracks at strategic locations. BNSF has also accepted WFA/Basin's operating plan for the LRR and many elements of their MOW plan, including the field track-maintenance districts and crew sizes. Thus the situation here is different than in the Xcel case.

Moreover, BNSF has not supported its proposal for longer setout tracks with anything more than conclusory statements by its MOW witness, such as the statement that "it is important to have maintenance equipment stored close by."[9] As discussed above, the FED setout tracks as designed by WFA/Basin's experts can accommodate most kinds of MOW equipment, and additional storage space for contractor work trains (which would be used infrequently, such as for rail or ballast programs) is provided on the four tracks specifically provided for MOW equipment storage and on one of the tracks at Orin Jct. BNSF has not even mentioned these tracks in the context of whether the LRR has adequate storage space for MOW equipment. BNSF has failed to demonstrate with specific evidence that any of the DED setout tracks need to be extended and the Board should reject its extension proposal.

[9] BNSF Reply Narr. at III.F-118 n.154.

ii. Additional DED Setout Tracks for Concrete Tie Areas

In addition to the FEDs provided by WFA/Basin, whose number and location BNSF has accepted, BNSF proposes to add a total of 45 DEDs, each with an accompanying 300-foot setout track (including the turnout). BNSF Reply Narr. at III.F-118 to 119. BNSF asserts that these additional setout tracks "[are] needed to accommodate the additional Dragging Equipment Detectors (DED) that are required on concrete ties. Concrete ties require that DEDs be placed every five miles." Id.

The additional DEDs thus are related to BNSF's proposal to construct the LRR with concrete ties rather than wood ties where the BNSF lines being replicated presently have concrete ties.[10] For the reasons set forth in Part III-F-3-c below, it is appropriate to construct the LRR with wood ties and unnecessary to use concrete ties. WFA/Basin will not repeat that discussion here, except to note that while concrete ties may represent BNSF's (and UP's) present "standard" on heavy-haul coal lines such as the Orin Subdivision, BNSF's "standard" is not indicative of what is the least-cost feasible alternative. In every prior PRB coal rate case, the Board has accepted the use of wood ties. See, e.g., Xcel I at 103. Indeed, in Xcel, which is the most recently-decided PRB coal rate case, BNSF agreed that it was appropriate to construct a SARR that carried most

[10] See, e.g., BNSF Reply Narr. at III.F-161 ("BNSF Engineering Consultants have constructed the LRR with the same types of ties as those used on the BNSF lines being replicated"). This means that about 83 percent of the LRR's lines would be constructed with concrete ties and the rest would be constructed with wood ties. See BNSF Reply Narr. at III.F-106, Table III.F.3-2.

of the same coal traffic the LRR carries with wood ties. Id. A mere two years later, BNSF now claims that the heavy pounding caused by the high volumes of coal traffic moving over the Orin Subdivision effectively requires the use of concrete ties. However, BNSF fails to mention the fact that 54 percent of the coal traffic moving over the Orin Subdivision is UP traffic, which the LRR does not handle. Thus the LRR will carry less than half of the total coal traffic that presently moves over the Orin Subdivision.

In addition, BNSF's proposal to equip the LRR with concrete ties only where the replicated BNSF lines have them is illogical. If wood ties are acceptable where they exist on these lines today, they are acceptable on all of the LRR's lines. Mixing tie types in the manner proposed by BNSF is absurd.

WFA/Basin Witness Reistrup further notes that when he was President of Amtrak, that carrier decided to install concrete ties rather than wood ties on the Northeast Corridor when it performed tie programs. Amtrak decided to switch to concrete ties because they are much heavier than wood ties and thus more stable against lateral movement at high passenger train speeds (110 to a maximum of 135 mph). It was estimated that concrete ties would have a 60-year useful life, but in practice many ties have been replaced in less than 30 years (and not due to heavy volumes of freight traffic). In addition, Mr. Reistrup notes that if there is a derailment on concrete ties, the track is destroyed as gauge cannot be maintained to the same extent as with wood ties. Thus, derailments tend to require more expensive repairs (and take longer) if they occur on track with concrete ties, which causes more disruption to train operations.

In short, BNSF has not demonstrated that the LRR requires concrete ties. However, even if the LRR were to be equipped with concrete ties, BNSF has utterly failed to explain why DEDs with setout tracks need to be placed every five miles. Again, this appears to be BNSF's present "standard" for track with concrete-ties, but BNSF has not presented any evidence explaining the basis for this "standard" or why the LRR must use the same standard. None of BNSF's electronic workpapers shed any light on this issue. Indeed, the principal workpaper cited in BNSF's Part III.F-6 discussion of the DEDs, "FED Site Criteria.doc,"[11] merely lists siting criteria. It does not provide any support for BNSF's bald assertion that additional DEDs are needed on track that has concrete ties; nor does it explain why they should be placed at 5-mile intervals. Accordingly, BNSF's proposal for additional DEDs must be rejected.

d. <u>Yard Tracks</u>

BNSF has accepted WFA/Basin's basic track configurations for the LRR's three yards, located at Donkey Creek, South Logan and Guernsey. The only issue raised by BNSF concerning yard track miles relates to the tracks for the locomotive maintenance facility at Guernsey. BNSF proposes to add 0.68 miles of track "outside of the Guernsey

[11] BNSF provided this electronic file in discovery, but did not in its Reply work-papers. WFA/Basin include it in their Rebuttal electronic workpapers for Part III-F-6.

locomotive shop at Guernsey Yard for holding inbound and outbound locomotives prior to entering and after leaving the shop." See BNSF Reply Narr. at III.B-5 and III.B-49.

The entire basis for adding 0.68 miles of track at the Guernsey locomotive maintenance facility is set forth in footnote 99 on page III.B-49 of BNSF's Reply Narrative. According to this footnote, the Guernsey locomotive shop needs to be sized to accommodate 11 locomotives every day, WFA/Basin did not provide a "layup" track in the vicinity of the shop, and BNSF Witness Mueller advised BNSF Witness Primm "to provide a track to be used for staging inbound and outbound locomotives at the shop."

As explained in Part III-F-7 below, BNSF has re-arranged the trackage in the area of the Guernsey locomotive shop without any explanation of why it did so other than its reference to the 0.68 miles of added track. WFA/Basin's engineering and operating experts disagree with the (unexplained) re-arrangement of this trackage. They also disagree that 0.68 miles of track need to be added at the Guernsey locomotive shop because the shop itself and the outbound shop track as designed by WFA/Basin are each configured to hold 15 locomotives, whereas both parties agree that a maximum of 11 locomotives will be in the shop on any given day. The 0.68 miles of track that BNSF proposes to add has nothing to do with inbound/outbound capacity but appears to be premised on a different flow of locomotives through the shop.

WFA/Basin's experts do agree with BNSF that the flow of locomotives into the Guernsey locomotive shop would be enhanced by the addition of a lay-up track. This track would provide room to hold locomotives that are out of service because of a catastrophic failure or wreck damage, pending evaluation and decision on how to handle repairs. Therefore, they have added a short, stub-end lay-up track, 260 feet (0.05 miles) long, located at the inbound (west) end of the shop. This track, which accommodates three locomotives, is shown in red on page 11 of Rebuttal Exhibit III-B-1.

e. Summary

WFA/Basin's summary of the parties' positions regarding the LRR's track miles is set forth in Rebuttal Table III-B-1 below. This table includes WFA/Basin's Rebuttal restatement of track miles based on the discussion in this section. The remaining difference between the parties is 15.82 track miles.

Rebuttal Table III-B-1 LRR Track Mile Calculations				
Type of Track	**WFA/Basin Op.**	**BNSF Reply**	**WFA/Basin Reb.**	**Difference**[1/]
Main Track	386.35	386.37	386.17[2/]	0.20
Mine Spurs	3.56	4.99	3.59[3/]	1.40
Setout, Interchange and Helper Tracks	14.90	28.49	14.90	13.59
Yard Tracks	41.70	42.38	41.75[4/]	0.63
Total	**446.51**	**462.23**	**446.41**	**15.82**

[1/] BNSF Reply minus WFA/Basin Rebuttal.

[2/] Removal of (a) 0.18 miles from WFA/Basin Op. calculation representing extra length of west wye leg at Campbell and (b) BNSF's addition of 0.02 track miles.

[3/] Addition to WFA/Basin Op. calculation of 0.03 miles at Moba Jct.; BNSF's other additions are excluded.

[4/] Addition to WFA/Basin Op. calculation of 0.05-mile locomotive lay-up track at Guernsey.

The three minor track changes that WFA/Basin have accepted (the omitted crossover at MP 14.20/14.25 on the Orin Subdivision, the added 0.05-mile locomotive lay-up track at Guernsey Yard, and the added 0.03 mile of track at Moba Jct.) are shown in red on pages 4, 11 and 12 of WFA/Basin Rebuttal Exhibit III-B-1. The removed Fort Union Mine turnout is shown in red on page 1 of this exhibit. Rebuttal Exhibit II-B-1 is otherwise identical to WFA/Basin Op. Exhibit III-B-2.

3. RTC Model Simulations

On Opening, WFA/Basin used the RTC Model to simulate the LRR's operations during its peak traffic week during the 20-year DCF period and to test the LRR network's capacity to handle its peak-week traffic in accordance with the LRR customers' requirements as measured by coal train round-trip cycle times. As the Board recently noted, the RTC Model is a commercially-available model that "has been thoroughly tested and has gained widespread acceptance among railroads, transit authorities, and government agencies." Xcel I at 27.

BNSF agreed with the use of the RTC Model,[12] and conducted its own RTC simulation of the LRR's peak-period operations. In its Reply RTC simulation, BNSF used the same LRR track and yard configuration used by WFA/Basin in their Opening RTC simulation, the same peak week, and most of the same trains that operate during the 13-day peak simulation period. BNSF's simulation corrected two "technical" errors in the LRR system as it was inputted into the RTC Model by WFA/Basin. BNSF also changed the train file used in WFA/Basin's Opening RTC simulation, with a net increase of 12 empty and 12 corresponding loaded trains during the 13-day simulation period, and it changed a few of WFA/Basin's operating inputs to the Model (primarily train dwell times at several locations). Other than these input changes, BNSF accepted WFA/Basin's system network and operating plan for the LRR.

[12] See BNSF Reply Narr. at III.B-7.

Even with BNSF's changes, the RTC Model ran to completion in BNSF's Reply simulation without any additions to the LRR's track infrastructure (main tracks, passing sidings, yard and interchange tracks) as described by WFA/Basin in their opening evidence. See BNSF Reply Narr. at III.B-8 and III.B-46. The fact that the RTC Model ran to completion even with BNSF's changes is clear testament to the robustness of the LRR system design and operating plan presented by WFA/Basin. However, the round-trip transit times from BNSF's RTC simulation were generally higher than those produced by WFA/Basin's Opening RTC simulation (although some were lower).[13] None of the higher train cycle times in BNSF's simulation were higher than BNSF's real-world 2004 peak-period cycle times for trains moving between the same LRR O/D pairs.

WFA/Basin discussed their RTC simulation in Part III-C of their opening evidence, since most of the Model inputs are derived from the LRR's operating plan. BNSF chose to discuss its RTC simulation in Part III.B of its reply evidence. WFA/Basin discuss BNSF's technical changes to the Model inputs in this section since they relate to the LRR system configuration. BNSF's proposed operational changes are discussed in Part III-C-3 below. As described in Part III-C-3, WFA/Basin successfully re-ran the Model with the input changes that they have accepted.

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[13] See BNSF Reply electronic workpaper "LRR Annual Statistics (BNSF Reply).xls," tab "Transit Times."

a. **Technical Input Changes**

BNSF made two technical corrections to the LRR system for purposes of its Reply RTC simulation. First, BNSF states that WFA/Basin's experts used incorrect grades at "several locations" on the LRR, primarily in the Whitetail Hill helper district between MP 4.0 and MP 7.8 on the Orin Subdivision. BNSF Reply Narr. at III.B-41. The Whitetail Hill errors related to the elevation at Milepost 7.8, which WFA/Basin inputted as 4,705.10 feet instead of the correct elevation of 4,735.30 feet. This caused the southbound grade on Whitetail Hill, as inputted into the RTC Model, to be 1.24% when it should have been 1.40%. WFA/Basin's RTC witness, Walter Schuchmann, agrees with BNSF's correction and has incorporated it (and a few other elevation corrections) into the Rebuttal RTC simulation. See WFA/Basin Rebuttal electronic workpaper "RTC grade and signal changes.xls."

Second, BNSF states that WFA/Basin incorrectly coded the signals at various locations, "which resulted in overlapping signal blocks which in turn provided conflicting directions to the RTC Model simulation." BNSF Reply Narr. at III.B-41. Mr. Schuchmann agrees that the signals identified by BNSF were coded incorrectly, and has corrected these errors in the Rebuttal RTC simulation. The relevant RTC case inputs are reflected in the "LRR REBUTTAL.NODE" and "LRR REBUTTAL.SIGNAL" files in the Rebuttal RTC folder contained in WFA/Basin's Rebuttal electronic workpapers.

b. Updating of the RTC Model

WFA/Basin note that the RTC Model has been updated since their opening evidence was filed. WFA/Basin Witness Schuchmann used Version RTC 260 L71F of the RTC Model for WFA/Basin's Opening simulation. BNSF used a later version of the Model, which it describes as "Version 78C," for its Reply simulation. See BNSF Reply Narr. at III.B-46. After reviewing BNSF's reply evidence, Mr. Schuchmann requested a copy of Version 78C from the RTC Model's proprietor, Berkeley Simulation Software. Mr. Schuchmann was informed that Berkeley did not retain that version and that it was no longer available except from BNSF. However, Berkeley provided Mr. Schuchmann with its latest update to the Model, Version RTC 2.60 L79Q, which appears to incorporate the adjustments made in the version used by BNSF. Although BNSF subsequently provided a copy of Version 78C to WFA/Basin, Mr. Schuchmann used the most current version of the model (RTC 2.60 L79Q) for the Rebuttal RTC simulation. This is consistent with BNSF's approach, which was to use the most recent available version of the RTC Model for its Reply simulation.

4. Other

As discussed at pp. III.B-47 to 50 of BNSF's Reply Narrative, BNSF has generally accepted the other LRR system parameters described in WFA/Basin's opening evidence, including yard locations and configuration, the absence of joint facilities, and the LRR's traffic control (signal) and communications systems including turnout types, sizes and locations, and the locations of AEI scanners and FEDs. BNSF did take issue with some of the rail weights and the tie specifications used by WFA/Basin. These items are discussed in Part III-F below since BNSF discussed them in Part III.F of its reply evidence.

III-C Operating Plan

III. C. <u>OPERATING PLAN</u>

The LRR's operating plan was developed by WFA/Basin's highly experienced team of rail operations experts, led by Paul Reistrup. In its reply evidence BNSF accepted WFA/Basin's operating plan virtually <u>en toto</u>. This is a "first" in a SAC rate case involving a Powder River Basin coal movement.

Both parties used the RTC Model to test the LRR's capacity requirements and the ability of its network (system) configuration to handle its peak-period traffic in accordance with customer transportation requirements. Various elements of the LRR's operating plan were used as inputs to the RTC Model by both parties. For the most part, these inputs were the same. <u>See</u> WFA/Basin Rebuttal Exhibit III-C-1, which lists 32 elements of WFA/Basin's operating plan that BNSF has accepted.

BNSF did change some inputs for purposes of its Reply RTC Model simulation. It made two technical corrections to the LRR's configuration, involving elevations and signal nodes. It changed the RTC study period train list due to various adjustments it made to the LRR's peak-year traffic group. It also changed a few of the operating inputs to the RTC Model. BNSF's changes placed additional burdens on the LRR network in terms of longer train dwell times at various locations and higher train transit times (with resulting changes in the number of locomotives, railcars and T&E employees required).

The RTC Model tends to be sensitive to modest changes in assumptions. Nonetheless, the Model ran to completion in BNSF's simulation without any need for changes to the LRR's configuration.[1] This conclusively establishes that the LRR's conservative network design and operating plan, as developed by WFA/Basin's experts, are feasible.

WFA/Basin have done everything the Board has asked complainants to do in developing a SARR operating plan. They relied on a commercially-accepted dispatching model, and made reasonable and realistic assumptions concerning the inputs to the model based on Board precedents. Not only are the LRR network and configuration capable of handling a crippling broken-rail incident at Bona in the peak traffic week, but the Opening RTC simulation also ran well with randomized train start and departure times.[2]

WFA/Basin thus have already carried their burden of proof in terms of demonstrating the feasibility of the LRR's operating plan. Nonetheless, although BNSF was unable to find a fatal flaw in WFA/Basin's operating plan or otherwise show that it is infeasible, BNSF's attempt to slow the system down by changing several RTC Model operating inputs in a manner that increased train cycle times (thereby increasing certain operating costs and capital requirements) requires a response.

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[1] None of the route-mile and track-mile changes proposed by BNSF (discussed in Part III-B above) affect the LRR network for purposes of either party's RTC simulation.

[2] See WFA/Basin Op. Narr. at III-C-55 and Op. Exhibit II-C-5..

WFA/Basin's experts do not agree with most of BNSF's proposed RTC Model input changes, but a few have merit. In this section of WFA/Basin's rebuttal evidence, their operating experts address each of BNSF's proposed operating input changes. WFA/Basin's experts also re-ran the RTC Model with the input changes they have accepted, using the latest available version of the Model. The results of the new Model runs are also presented in this section.

1. General Parameters

a. Traffic Flow and Peak-Period Train Counts

BNSF generally accepted the traffic flows assumed by WFA/Basin, but modified the LRR's peak year traffic in certain respects. These modifications are addressed in Part III-A above. The modifications to the LRR's peak year traffic resulted in changes in the peak-period train file used in the RTC Model simulation.

WFA/Basin modeled the empty and loaded coal trains that move on the LRR network during a 13-day period in the peak traffic year, 2024, that includes the peak one-week period { }. BNSF accepted the 13-day modeling period and the peak week, but made some modifications in the peak-period trains. See BNSF Reply Narr. at III.B-45 and III.C-3 to 4. The modifications are described at BNSF Rely Narr. III.B-42 to 43, and the specific trains involved are shown in WFA/Basin Rebuttal electronic workpaper "BNSF RTC Train List Changes.xls."

BNSF's proposed changes to the peak-period train file used in the RTC Model fall into three categories:

(i) WFA/Basin failed to include five trains (four base year peak trains and one growth train) that appear in its list of peak-year trains in its RTC simulation, and failed to create a growth train for one of the omitted base-year trains (six trains total).

(ii) WFA/Basin failed to include Scherer coal trains that actually moved during the peak period of the base year, instead treating all Scherer trains as new trains, which understated the peak-period simulation trains by six trains.

(iii) The different escalation factors used by BNSF to determine the increase in tonnage for certain destinations between the base year and the peak year resulted in a change in the growth trains used in the RTC simulation for seven destinations (12 trains, but no change in the number of peak-period trains).

See BNSF Reply Narr. at III.B-42 to 44. WFA/Basin accept the addition of one growth train in category (i), and they accept BNSF's changes to the Scherer trains in category (ii). They do not accept the need for any category (iii) train changes due to BNSF's use of different tonnage escalation factors – and in any event, the category (iii) changes would not alter the number of trains included in the RTC simulation.

i. Failure to Model All Trains in RTC Train List

BNSF asserts that five trains were erroneously omitted from WFA/Basin's RTC train list and thus were not included in the Opening RTC simulation. These five trains, shown in WFA/Basin Rebuttal electronic workpaper "BNSF RTC Train List Changes.xls," rows 61-65, are empty trains whose prior loaded move was to a customer included in the LRR's traffic group. However, after these trains arrived at the LRR on-junction (Guernsey or Donkey Creek), they were subsequently loaded for movement to non-LRR customers. This is the reason why they were not included in the Opening RTC simulation – they simply are not trains that the LRR will handle.

With respect to the sixth train in this category (empty coal train E0KCLBTM70AFG), WFA/Basin's experts agree with BNSF that this is a growth train that should have been included in the RTC simulation. They have therefore included this train and its corresponding loaded train (C0BTMKCL72AFG) in the Rebuttal RTC simulation.

ii. Scherer Trains

WFA/Basin included 35 empty (and 35 corresponding loaded) Scherer trains in the RTC simulation. BNSF points out that WFA/Basin treated Scherer trains as new trains for purposes of the RTC simulation, and that in fact BNSF moved 37 actual Scherer trains during the 2004 (base year) peak period. Adding four growth trains produces a total of 41 trains, or six more trains than WFA/Basin modeled. See BNSF Reply Narr. at III.B-43.

WFA/Basin's treatment of the Scherer trains as new trains was consistent with the methodology they used to escalate the base year traffic to the peak year traffic.[3]

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[3] On Opening, WFA/Basin treated the Scherer trains as "new" trains because of the abnormal growth factor produced when the 2003 actual tonnage to Scherer is divided by (continued...)

However, WFA/Basin's experts recognize that it is also logical to include the actual Scherer trains that moved during the peak period of the base year, plus corresponding growth trains. To minimize disputes between the parties, WFA/Basin have decided to accept BNSF's revised list of 2024 peak period Scherer trains and have substituted them for the Scherer trains that were included in the Opening RTC train list.

iii. **Differences In Tonnage Escalation Factors**

As discussed in Part III-A-2-b above, BNSF proposes to use one of its internal forecasts in lieu of the EIA's AEO 2005 forecast to forecast the change in the LRR's coal tonnage from 2006 to 2009. This resulted in a slight reduction in the peak-year (2024 tons) and minor changes in the RTC peak study period trains. See BNSF Reply Narr. at III.B-43 to 44. The changes involve 12 empty and 12 loaded trains moving from/to seven destinations, as shown in WFA/Basin Rebuttal electronic workpaper "BNSF RTC Train List Changes.xls," rows 108-119.

For the reasons set forth in Part III-A-2-b, WFA/Basin disagree that the forecast methodology needs to be changed. Therefore, there is no reason to change the train list to reflect the forecast methodology change and WFA/Basin have not done so. In any event, the number of affected trains included in the RTC simulation remains at 12 regardless of which methodology is used (although there are changes in the specific LRR

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[3] (...continued)
the 2024 peak-year tonnage. WFA/Basin also handled tonnage moving to the Coronado and Monticello plants in the same manner, which BNSF accepted on Reply.

O/D pairs involved). Therefore, changing these trains is unlikely to affect the simulation results in any event.

The revised train list used in WFA/Basin's Rebuttal RTC simulation is set forth in WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls," tabs "Peak_Empty_Trains" and "Peak_Loaded_Trains."

b. Track and Yard Facilities

BNSF has accepted the track and yard facilities for the LRR as proposed by WFA/Basin with the minor adjustments to route miles and track miles described in Part III-B-1 and III-B-2 above. See BNSF Reply Narr. at III.C-4 to 5. WFA/Basin do not accept most of BNSF's adjustments – but, in any event, the adjustments do not affect the LRR's track and yard configuration as input into the RTC Model by both parties.

BNSF has also accepted the LRR's maximum train speeds (including the speed restrictions on the Campbell and Reno Branches and for loaded coal trains); construction of the tracks to permit a maximum gross weight on rail ("GWR") of 286,000 pounds; use of 25-foot track centers in multiple-track territory to facilitate train operations on one track while maintenance is being performed on the other track; and equipping the entire LRR system with CTC and mainline power switches. Id. at III.C-5.

In short, there is no disagreement between the parties concerning the LRR's track, yard and other facilities for purpose of the RTC Model simulation.

c. Trains and Equipment

i. Train Sizes

Under the LRR operating plan presented in WFA/Basin's opening evidence, the LRR operates only unit coal trains, and its train sizes are the same as those operated by BNSF during the base year (i.e., the period from 4Q03 through 3Q04 which is the most recent 12 months for which BNSF provided train movement data in discovery). The train sizes and locomotive consists will remain the same throughout the 20-year DCF period; increased volumes are accounted for by adding trains for each O/D pair that are equivalent to the size of the trains BNSF operated in the base year. BNSF has accepted all of these parameters. BNSF Reply Narr. at III.C-6.

There are some minor disagreements between the parties with respect to the number of trains that should be included in the 2024 peak period that was studied using the RTC Model. These differences are discussed in Part III-C-1-a above. WFA/Basin also note that, notwithstanding BNSF's argument that the traffic that moves only over the portion of the LRR system north of Campbell/Donkey Creek should be excluded due to an alleged cross-subsidy, BNSF included all of the trains carrying this traffic in its RTC simulation, as well as the associated locomotives, railcars and T&E crews. If these trains had been excluded, the cycle times for the many remaining trains that haul coal from the mines north of Donkey Creek to LRS and the interchange points south of Donkey Creek would certainly have been faster.

ii. **Locomotives**

Under WFA/Basin's operating plan, the LRR operates two types of locomotives: EMD SD70MAC locomotives for road service, and EMD SD40-2 locomotives for helper, yard switching and work train service. BNSF has accepted these locomotive parameters, as well as the number of road locomotives per train. See BNSF Reply Narr. at III.C-6 to 8. BNSF has also agreed that the number of locomotives required for helper, yard switching and work train service in the peak year is 13. Id. at III.C-6. However, BNSF disagrees with WFA/Basin's calculation of the number of road locomotives required in the peak year.

(a) **Road Locomotives**

The number of road locomotives needed by the LRR is a function of three factors: (1) the number of trains and the number of locomotives per train; (2) train transit times (produced by the RTC Model simulation), which drive locomotive hours; and (3) the locomotive spare margin (which may also include a peaking factor, depending on the circumstances). On Opening, WFA/Basin calculated that in the peak year the LRR needs a total of 105 road locomotives, including a spare margin of 8.6 percent. See WFA Op. Narr. at III-C-9 to 16.

In its reply evidence BNSF accepted the number of locomotives per train specified in WFA/Basin's operating plan. See BNSF Reply Narr. at III.D-7 to 8. BNSF also accepted WFA/Basin's locomotive spare margin of 8.6 percent. Id. at III.C-11.

However, it disagreed with WFA/Basin's peak-year locomotive count because of an increase in the peak study period train count, the changed cycle times and locomotive hours that resulted from its Reply RTC simulation, and the addition of a peaking factor to the agreed spare margin. BNSF's changes produced an increase in the LRR's peak-year road locomotive count from 105 to 121, or an increase of 16 locomotives.[4]

On Rebuttal, WFA/Basin's operating experts (led by Mr. Reistrup) have adjusted the LRR's peak-year road locomotive count to reflect the revised peak-year trains and the transit/cycle times and corresponding locomotive hours produced by the Rebuttal RTC simulation. However, these experts disagree with BNSF that a peaking factor should be added to the agreed spare margin, given the manner in which they have calculated the LRR's peak-year locomotive requirement. Applying the same methodology used on Opening, the revised LRR peak-year road locomotive requirement is 104 locomotives including the same agreed 8.6 percent spare margin. This is a reduction of one locomotive from Opening, and 17 fewer locomotives than BNSF calculated on Reply.

(b) <u>Peaking Factor</u>

On Opening, WFA/Basin did not apply a peaking factor to the LRR's peak-year road locomotive count in addition to the 8.6 percent spare margin. The reason is that

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[4] BNSF agreed with WFA/Basin's procedure for adjusting the LRR peak year locomotive requirement back to the base year requirement. BNSF Reply Narr. at III.C-9.

their operating experts used the cycle times and locomotive hours from the LRR's peak week, and extrapolated the locomotive hours for the peak week to the entire year. WFA/Basin Op. Narr. at III-C-14 to 15. The 8.6 percent spare margin was then applied to the resulting annualized number of locomotive hours. Because WFA/Basin's experts extrapolated the peak week locomotive hours to the peak year – a very conservative approach since the actual number of locomotive hours for the peak year would have been lower due to lower traffic volume and faster cycle times during the other weeks of the year – there was no need to apply a separate peaking factor (which in effect would have "peaked the peak"). Moreover, the result did not differ from the result produced using the methodology approved by the Board in Xcel II. Id. at III-C-15 to 16.

In its reply evidence, BNSF did not comment at all on the propriety of the approach used by WFA/Basin. Instead, it simply applied the same methodology (including use of a peaking factor) that the Board used in Xcel II. WFA/Basin submit that their approach produces very similar results to those produced by the Xcel II methodology, and avoids the illogical application of a peaking factor to the SARR's annualized peak week locomotive requirement. Application of a peaking factor would require the LRR to acquire four additional locomotives (based on the Rebuttal RTC simulation) that it would use only during the peak week of the year. The rest of the time these locomotives would in effect have to be "shrink wrapped" and stored somewhere. This would require an additional, separate track (probably at Guernsey Yard) that would be used only to store locomotives 51 weeks per year. No real-world railroad would build this kind of inefficiency into its equipment and facilities, and a SARR should not be required to do so either.

As noted above, WFA/Basin's Opening peak year LRR locomotive requirement of 105 was the same using either the Xcel II peaking approach or using the peak week locomotive hours extrapolated over the entire peak year plus an 8.6 percent spare margin. The LRR's locomotive requirements changed as a result of the Rebuttal RTC simulation. In particular, the peak year locomotive count based on the peak week locomotive hours extrapolated over the entire peak year plus the agreed 8.6 percent spare margin is now 104. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls," tab "Peak to Base Summary," cell J15. The new peak year locomotive requirement using the Xcel II methodology is 108. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Annual Statistics.xls," tab "SARR Traffic_2024," cell AL145. As the LRR should not need more locomotives then the requirements determined based on the peak week locomotive hours, the Xcel II methodology produces a flawed result in this instance.

BNSF's Reply peak year locomotive count again demonstrates that the Xcel II methodology can overstate locomotive requirements versus extrapolating the peak week locomotive hours over the entire peak year. For example, BNSF's peak year locomotive count using the Xcel II methodology was 121 (including the agreed 8.6

percent spare margin). See BNSF Reply Narr. at III.C-11. When BNSF's peak week locomotive hours are extrapolated over the entire year, the locomotive count changes to 115. See WFA/Basin Rebuttal electronic workpaper "BNSF Reply RTC model train list (WFA Edits).xls," tab "Sheet 4," cells B21-B25. Since, as noted above, BNSF has not disputed the approach that WFA/Basin used to determine the LRR's locomotive requirements and the Xcel II methodology overstates the locomotives needed, WFA/Basin urge the Board to use their approach.

While WFA/Basin do not believe the Xcel II approach is appropriate, BNSF has suggested that WFA/Basin used the wrong number of peak week trains to determine the peaking factor under the Xcel II methodology. See BNSF Reply Narr. at III.C-10. On Opening, WFA/Basin determined the Xcel II peaking factor using 328 peak week trains versus 287 in an average week for a factor of 14.3 percent. On Reply, BNSF argues that WFA/Basin should have used 333 trains in the peak week (yielding a 15.9 percent peaking factor) based on WFA/Basin's Opening electronic workpaper file "Base Year Trains.xls," tab "Summary," cell O351. Id. WFA/Basin disagree.

On Opening, WFA/Basin reduced the peak week train count from 333 to 328 because they identified five empty trains where the corresponding loaded train did not return to an LRR customer.[5] Thus, those trains were manually excluded. However,

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[5] The five trains and their linked loaded trains were E0SFBBTM01AF-C0NAMSCC14AF, E1THHNAM91AF-C2NAMMEA97AF, E0MEKBTM16AFG-
(continued...)

on further examination, WFA/Basin have identified an error in their revision; only two of the five trains operated during the peak week, the other three operated during the warm-up period for the RTC simulation. Thus, WFA/Basin should have used 331 versus 287 (15.3 percent) for the Xcel II peaking factor, and they have corrected this on Rebuttal for purposes of illustrating the results produced using the Xcel II methodology.

(c) Helper and Switch/Work Train Locomotives

Helpers. BNSF accepted the LRR's helper districts, helper assignments, helper locomotive consists, and number of SD40-2 helper locomotives specified in WFA/ Basin's operating plan. BNSF Reply Narr. at III.C-11. However, BNSF noted that 11 additional RTC study period trains required helpers due to the corrected elevations on Whitetail Hill near the north end of the Orin Subdivision and the corrections to the Scherer train list. BNSF further noted that adding helpers to these trains did not require adding any helper locomotives or creating a new helper district. Id.

The Rebuttal RTC simulation indicates that there are two brief periods during the peak week when the three regularly assigned Donkey Creek area helper sets are not sufficient to meet the demand for helper service on the Campbell Subdivision and

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[5] (...continued)
C3NAMMEA03AFG, E0MEKBTM16AF-C3NAMMEA03AF and E0CDJCRM44AF-C0CAMSCA16AF. See WFA/Basin Rebuttal electronic workpaper "BNSF RTC Train List Changes.xls," rows 61-65.

the northern part of the Orin Subdivision. See WFA/Basin Rebuttal Workpapers, pp. 00322-325 for details.

First, five trains require helper assistance between 2300 hours on { } and 0230 hours on { }. Because the additional helper consist is needed for a single train, the LRR would use the two extra SD40-2 locomotives stationed at Donkey Creek/Campbell to supplement the regular helper consists during this brief period.[6]

Second, five trains require helper service between 1024 hours and 1314 hours on { }. Again, the two extra SD40-2 locomotives normally assigned as spare/work train units at Donkey Creek would be employed to assist one of these trains. Also, two additional SD40-2 locomotives normally assigned as spare/work train units at Guernsey would be assigned to assist one train. Anticipating peak demand for helpers during the peak traffic week (which is not unusual for busy railroads), these two units would have been moved in advance to Donkey Creek either under power or dead-in-consist by a northbound empty train. They then would be in position to be used as helpers when needed during the peak shipping period (again, no work trains are operated during this period). These units could be returned to Guernsey on a loaded train when no longer

[6] The extra locomotives at Donkey Creek/Campbell include a work-train locomotive and a spare locomotive; see WFA/Basin Op. Narr. at III-C-20. No work trains operate during the LRR's peak traffic period, and in any event work trains do not operate at night.

needed, or they could be rotated into the Donkey Creek helper/work locomotive pool and another pair of SD40-2s nearing their required 92-day inspection could be shuttled to Guernsey and subsequently assume yard/work train/spare assignments there.[7]

In the real world, a railroad such as BNSF would probably let a loaded train sit occasionally, waiting for a helper consist to be available. It certainly would not acquire a few extra helper locomotives that would sit idle for all but 14 hours during the peak traffic year. The LRR would not do this, either. Nor does the LRR need to let trains sit waiting for helpers, as it can turn to its existing resources during the two very brief periods of heavy helper demand described above.

Switch/work train locomotives. BNSF also accepted the number of SD40-2 locomotives WFA/Basin's operating experts designated for switching service at Guernsey Yard and for work train service. Id. at III.C-12. However, BNSF disagreed with the number of Guernsey switch crew employees provided by WFA/Basin. BNSF allocated 11 employees to man the two 24/7 switch crew assignments (with each crew working a 12-hour shift), rather than the five employees allocated by WFA/Basin. Id.

Review of BNSF's Reply electronic spreadsheet "switch crews.xls," which calculates switch crew requirements, shows that BNSF's calculation of 11 switch crew

[7] WFA/Basin's operating experts also note that the LRR will keep some spare SD70MAC road locomotives at Donkey Creek, and one of these units could also be pressed into temporary helper service (e.g, if there is a mechanical failure involving one of the Donkey Creek SD40-2 units so that the spare unit is temporarily unavailable).

members is erroneous because it is based on the use of two-person switch crews. In fact, the parties have agreed that each LRR switch crew consists of one person and that each switch-crew shift works 12 hours. See BNSF Reply Narr. at III.D-22. However, the correct number of switch crew employees is actually six, not five. See WFA/Basin Rebuttal electronic workpaper "LRR Switch Crews Reb.xls." Accordingly, WFA/Basin have added one employee to their T&E personnel count to cover the switching assignments at Guernsey.

iii. Railcars

Based on their analysis of BNSF's transportation contracts and pricing documents, the transit times produced by their RTC Model simulation, and a five percent spare margin, WFA/Basin determined that the LRR would require 448 railcars in the peak year to transport coal traffic for which BNSF provides the cars. See WFA/Basin Op. Narr. at III-C-20 to 22 and Op. electronic workpaper "LRR Operating Statistcs.xls," worksheet "Summary." BNSF asserts in its reply evidence that WFA/Basin understated the LRR's car requirements, and that in the peak year the LRR actually needs 867 cars rather than 448 cars. See BNSF Reply Narr. at III.C-13 to 17.

The difference between the parties' calculation of the number of railcars to be provided by the LRR in the peak year is based on four factors. These include: (1) transit times produced by the RTC Model, (2) spare margin; (3) peaking factor; and (4) identification of which entity (shipper or railroad) is currently obligated to provide the railcars.

RTC differences. As discussed in Part III-C-2 below, BNSF made several inappropriate adjustments to the RTC Model inputs which resulted in overstated transit times. In turn, these overstated transit times resulted in an increase in the number of railcars that must be acquired by the LRR to provide service to those customers which currently use carrier-supplied cars. WFA/Basin's Rebuttal RTC simulation corrects BNSF's inputs and produces transit times that are the best evidence of record.

Spare margin. BNSF claims that WFA/Basin's five percent spare margin for railcars is "artificially low." BNSF Reply Narr. at III.C-16. To the contrary, as demonstrated in WFA/Basin's opening evidence, a five percent spare margin is not only feasible, but is based on the contractual obligations in BNSF's rail transportation contracts with several of the shippers in the LRR traffic group.[8]

In place of WFA/Basin's five percent railcar spare margin, BNSF asserts that a 10 percent spare margin must be used because this is close to WFA/Basin's actual experience for the LRS movement and because a 10 percent spare margin was accepted by the Board in Xcel I. BNSF's arguments for using a 10 percent spare margin do not pass muster.

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[8] See WFA/Basin Op. Narr. at III-C-22 to 23 and Op. electronic workpaper "Railcar Spare from Transp. Contracts.xls."

First, BNSF's assertions concerning the spare margin for the LRS movement are wrong. A total of three trainsets are used in LRS service, with each trainset consisting of 136 cars for a total of 408 cars. WFA/Basin provide a total of { } cars and BNSF provides { } cars for this movement. See WFA/Basin Op. Narr. at II-A-3 and Op. Workpapers Vol. 7, p. 04175. Thus the total cars provided equals { }, and the actual spare margin (including both LRS and BNSF cars) equals { } percent. The fact that WFA/Basin have substituted different individual cars on occasion does not alter this spare margin.

Second, the Board's Xcel I decision indicates that Xcel did not offer any evidence supporting its use of a five percent railcar spare margin. Id. at 61. Moreover, in TMPA, the Board accepted TMPA's use of a five percent railcar spare margin, based on BNSF coal transportation contracts, i.e., the same form of evidence relied on by WFA/Basin in this proceeding. Id. at 83.

Third, as discussed above with regard to locomotives, BNSF used the Board's Xcel II methodology to determine a peaking factor. BNSF applied this same peaking factor to the railcars required by the LRR. As discussed with respect to the LRR's locomotive requirements, WFA/Basin's methodology is superior to BNSF's peaking factor methodology and should be used with respect to railcars as well as locomotives.

Entity that is obligated to provide railcars. BNSF claims that WFA/Basin's contract and pricing document review does not provide an accurate reflection of the cars actually provided by BNSF, and has resulted in an understatement of the cars that the LRR must provide. Rather than relying on its actual transportation contracts to determine which party supplies railcars for shipments on the LRR, BNSF bases LRR-versus-shipper car ownership on data contained in its traffic tapes, combined with input from BNSF's coal marketing department. BNSF claims that by using the traffic tapes it performed "a more detailed evaluation" than WFA/Basin. BNSF Reply Narr. at III.C-15.

BNSF first determined car ownerships from the data in its traffic tapes. BNSF's marketing department then reviewed information for all destinations for which at least 30 percent of the railcars were shown to be provided by BNSF to determine if BNSF, in fact, leased the railcars moving to this destination. BNSF then assumed that all cars moving to these destinations would be provided by the LRR.

BNSF's reliance on the data contained in the traffic tapes fails to recognize the "swap" agreements entered into by BNSF with several shippers whereby the coal transportation contract specifies that the shipper will provide the railcars required for the movement, but that BNSF can use these shipper-provided cars in other service as long as it supplies cars for the service covered by the contract. As a result, the traffic tapes may well show that the traffic moves in railroad-provided cars when, in fact, the shipper has provided BNSF with cars for the service which BNSF is using in some other service. The probative factor for identifying the economic obligation of the parties is the specific terms of the transportation agreements. These terms determine which party is responsible for supplying the railcar, which in turn is a factor in determining the rate level charged to the shipper. These rates are contained in the BNSF traffic tapes and relied on by the parties to determine the LRR's revenues.

For example, BNSF's coal transportation agreement with { } provides that BNSF { } Id. The net effect { } is that { } supplies sufficient railcars for the movement of coal to its { } plant at no charge to BNSF, which BNSF can use in service to other customers, and in return BNSF supplies other cars for the movement of coal to the { } plant. In fact, review of BNSF's car movement records provided in discovery in this proceeding shows that the { } cars leased to BNSF are used to move coal to { } plant.[10]

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[9] See WFA/Basin Op. Workpapers, pp.00326-354.

[10] See WFA/Basin Rebuttal electronic workpapers { }

To put this in the context of BNSF's Reply evidence, BNSF's traffic tapes show that { } percent of the cars moving to { } plant are railroad-provided cars and that { } percent of cars moving to { } plant are shipper-provided cars. Yet, for determining the cars that must be provided by the LRR, BNSF's traffic tape/coal marketing department review methodology assumes that all coal moving to both plants moves in railroad-provided cars. In contrast, WFA/Basin's contract and pricing review methodology correctly recognizes that { } provides cars to BNSF which BNSF uses in the { } service and {

}

In addition to assigning ownership responsibility to the LRR for cars identified by BNSF's marketing department, BNSF also assigned ownership responsibility to the LRR for all cars shown to be railroad-provided cars on the traffic tapes to destinations where less than 30 percent of the cars were provided by BNSF. For example, the traffic tapes show that {

} move in railroad provided cars, and BNSF therefore assumed that the LRR must provide railcars for { } percent of the shipments to { }, regardless of which party has the contractual obligation to provide the cars. Using this methodology, BNSF assigned partial car supply responsibility to the LRR for { } destinations where less than 30 percent of cars were provided by BNSF. For these destinations BNSF determined that up to { } percent of the railcars moving to a given destination would be supplied by the LRR. See BNSF Reply electronic workpaper "4Q03-3Q04 Cars Summary by OD (SMRTOWCI).xls."

BNSF is incorrect in relying on the traffic tapes to determine responsibility for supplying railcars to these destinations. The transportation contracts for coal movements to these destinations indicate that the shipper is responsible for providing the cars. Assuming that the data in BNSF's traffic tapes regarding car ownership is accurate, a BNSF-owned car may be placed in service to one of these destinations at BNSF's convenience, but not at its economic cost. For example, if a shipper-provided car is bad ordered and a spare car contractually provided by that shipper is available in a BNSF yard but not readily accessible, BNSF for its own operating efficiency may use one of its cars as a replacement even though the shipper-provided spare is available. In addition, BNSF-provided cars are provided to transport make-up tonnage (under contracts that call for private cars) that BNSF failed to transport in accordance with its contractual service commitments.

For the above reasons, WFA/Basin continue to rely on their Opening methodology to identify the railcars that must be provided by the LRR, and on the transit times produced by their Rebuttal RTC Model simulation. The result is that the LRR needs a total of 450 railcars in the peak year (including a five percent spare margin), or an increase of two cars from WFA/Basin's Opening number. See WFA Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls."

2. Cycle Times and Capacity

Both parties used the RTC Model to determine the LRR's train cycle times and to assess the ability of the LRR system and operating plan to accommodate the railroad's traffic volume during the peak week of the peak traffic year (2024). BNSF accepted WFA/Basin's basic approach to determining LRR train cycle times and the use of cycle times to establish the LRR's equipment and crew requirements. See BNSF Reply Narr. at III.C-17. BNSF also accepted the vast majority of WFA/Basin's inputs to the RTC Model. However, BNSF disagreed with a few operating inputs, involving times for the performance of several activities and random track outages. The differences between the parties with respect to these inputs are discussed here since they relate to the LRR's operating plan.[11]

BNSF's disagreement with WFA/Basin's operating inputs to the RTC Model includes the following five items:

a. WFA/Basin did not make adequate provision for the presence of Union Pacific ("UP") trains at jointly served PRB mines.

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[11] As discussed in Part III-B-3-a above, BNSF also made two technical corrections to the LRR's configuration for purposes of its Reply RTC simulation, involving track elevations (grade) at a few locations and signal coding. WFA/Basin have accepted these corrections and incorporated them into their Rebuttal RTC simulation.

b. WFA/Basin overstated the effective operational capacity of eleven of the PRB mines to accommodate unit coal trains.

c. WFA/Basin understated the number of "random failures" during the simulation period.

d. WFA/Basin understated the time requirements for LRR trains, including unloading/dwell time at LRS and time for adding a fourth locomotive to some loaded coal trains at Guernsey Yard.

e. WFA/Basin incorrectly retained helper locomotives on seven trains beyond the end of the helper district.

See BNSF Reply Narr. at III.B-7 to 8. WFA/Basin's operating experts agree that some adjustments are warranted for items b., c., d. and e. They disagree that any adjustment is needed for item a.

a. Presence of UP Trains at Jointly Served PRB Mines

WFA/Basin's operating experts, Paul Reistrup and Paul Smith, allotted 5.5 hours of dwell time for loading each train at the mines served via the Orin and Reno Subdivisions (i.e., the mines that both the LRR and UP serve).[12] WFA/Basin Op. Narr. at III-C-37 to 41. BNSF accepts the 5.5 hours, but argues that additional time must be allowed for delays caused by the presence of UP trains (and residual BNSF trains) at the jointly served mines. BNSF Reply Narr. at III.B-8 to 16. BNSF argues that the 5.5 hours of dwell time accounts only for the time a train takes to go through the loading process,

[12] WFA/Basin allotted six hours of dwell time at each of the mines on the Campbell Branch, which are not served by UP. BNSF agrees with this time allotment; see BNSF Reply Narr. at III.B-45.

after it arrives at the mine, and that WFA/Basin ignored whether the mine(s) have space available to admit another LRR train. BNSF purports to account for the presence of UP trains at the jointly served mines by including the UP trains that were actually present at these mines during the same 13-day peak period of the base year that both parties used as the study period for the peak year in their RTC simulations.

Messrs. Reistrup and Smith disagree with BNSF's position on this issue for several reasons. First, they note that the Board used 5.5 hours of dwell time at the jointly served PRB mines in TMPA. The 5.5 hour allotment included an allowance to account for the presence of UP trains. Id. at 75.

Second, if it were not necessary to account for the presence of UP, trains the mine dwell time would be considerably lower than 5.5 hours. Each of the jointly served mines can load a train in two hours or less. If no UP trains were involved, Messrs. Reistrup and Smith would have allotted considerably less than 5.5 hours (and the actual average dwell time for BNSF trains would have been lower during the 2004 peak period). Separately accounting for the presence of UP trains by requiring that some empty LRR trains be held short of the mines (as BNSF did in its RTC simulation), while also allotting 5.5 hours of dwell time at the mine for the same trains, effectively double-counts for the presence of UP trains.[13]

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[13] It should also be noted that in both parties' RTC simulations, more than one LRR train frequently dwells at a particular mine at the same time (although all trains (continued...)

Third, it is very unlikely that UP coal trains will arrive at jointly served mines during the 2024 peak period at the same time they arrived at these mines in 2004. Moreover, as explained below, the LRR and UP will have a joint dispatching arrangement (just as BNSF and UP do today), and this arrangement would minimize the likelihood of mine conflicts between LRR and UP trains during the 2024 peak period.

BNSF asserts that a loading dwell time of 5.5 hours "could only be accomplished by the LRR if it carried out the same staging activities that the real-world railroads carry out to make such a loading time possible" and that if BNSF and UP "did not coordinate their access to the mines and try to avoid sending trains to the mines when available loading capacity is taken up by other trains, congestion near the entrance of each mine would increase substantially." BNSF Reply Narr. at III.B-12. This implicitly assumes that the LRR would not have a similar arrangement with UP, which is irrational. The LRR and UP (as well as the residual BNSF) would have every incentive to coordinate train arrivals at the jointly served mines in order to minimize congestion and delay. BNSF's assumption that the LRR would have to stage trains short of the mines whenever a real-world UP train is present attempts to force all of the coordination costs

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[13] (...continued)
dwell for 5.5 hours) because the mine has capacity to hold several trains at a time. Again, if there were no UP trains, some of these trains would depart the mine less than 5.5 hours after arriving on mining company trackage.

onto the LRR. This is unreasonable. In reality, both the LRR and UP would adjust to one another and would share the coordination costs.

In fact, by stepping into BNSF's shoes as the incumbent for most of its PRB coal traffic the LRR would inherit the present joint dispatching arrangement between BNSF and UP for the PRB Joint Line. The LRR and UP would be in a position to make that arrangement far more efficient because the LRR does not use the Joint Line. Instead, the LRR is building its own track to serve the mines. This would result in better coordination of train arrivals at the jointly served mines than is presently achievable in the real world.

UP trains (and most BNSF trains) enter the Joint Line (Orin Subdivision) at Shawnee Jct., WY. Shawnee Jct. is located at MP 117.7 and is more than 52 miles south of the southernmost jointly served mine (Antelope Mine, whose spur connects with the Joint Line at MP 65.4). Since LRR and UP trains do not share the Joint Line itself, but enter and leave the mine leads at the points where they connect with the LRR (as shown in BNSF's RTC simulation), empty-train arrivals can be coordinated much closer to the mines than is possible with BNSF and UP trains.

In addition, Messrs. Reistrup and Smith point out that the LRR has more empty-train staging capacity, closer to the mines, than the real-world BNSF has. Unlike the real-world BNSF, the LRR has a yard at Donkey Creek and WFA/Basin's experts have provided for two extra yard tracks there for staging empty trains. (One of these tracks was disabled for purposes of the RTC simulation.) Unlike the real-world BNSF, the LRR also has a yard at South Logan, located at Orin Subdivision Milepost 74 and thus only ten miles south of Antelope Mine, whose sole purpose is to stage empty trains. This yard was not used by any trains during the RTC simulation. Additional train staging capacity is also provided by sidings at Reno and on the Reno Branch near the Black Thunder and Jacobs Ranch Mines,[14] and by the three interchange tracks at Orin Jct. – one of which is not used at all for interchange purposes during the peak simulation period as noted at pp. III-B-12 to 13 above. There is also a long siding at Wendover that can be used to stage empty trains. See WFA/Basin Op. Exhibit III-B-2, page 12 and WFA/Basin Rebuttal Exhibit III-B-1, page 12.

Finally, Messrs. Reistrup and Smith have allotted two extra hours of dwell time at the LRR's Guernsey Yard for each empty train that passes through Guernsey. See WFA/Basin Op. at III-C-42.[15] Up to seven empty trains at a time can be held for two additional hours at Guernsey if necessary to coordinate mine arrivals with UP.

[14] The Orin Subdivision siding near Reno is not used by any LRR trains during the RTC simulation. There are four sidings on the Reno Branch. One of these sidings is used only four times during the entire 13-day simulation period, and a second siding is used only 13 times during the simulation period. This light use confirms their availability to provide staging capacity in the event of congestion resulting from the presence of UP trains at the two mines served by this branch.

[15] BNSF agrees with the dwell time allotted at Guernsey for empty coal trains. See BNSF Reply Narr. at III.B-37 n.71 and III.B-45

In summary, not only does the 5.5 hours of mine dwell time include extra time to allow for the possible presence of UP trains, but, in addition, Messrs. Reistrup and Smith have provided a good deal of extra empty-train staging capacity that BNSF does not have today. As the Board noted in Xcel II, "It does not matter where the [SARR] operating plan would stage the trains, so long as trains would flow into and out of the PRB region in a reasonable fashion." Id. at 12. WFA/Basin's detailed evidence concerning the train staging capacity available to the LRR (as confirmed by the RTC Model simulation) meets this test. There is no legitimate reason to double-count for the presence of UP trains by adding 2004 UP trains to the RTC simulation of the LRR operations in 2024.

b. Operational Train Capacity of PRB Mines

For purposes of the Opening RTC simulation Messrs. Reistrup and Smith assumed that each PRB mine could accommodate on-site (i.e., on its private trackage) the number of trains stated in the most recent version of BNSF's Guide to Coal Mines. WFA/Basin Op. Narr. at III-C-39. BNSF states that the effective "operational capacity" of 11 of the mines is less than their physical capacity to hold trains, as shown in the Guide to Coal Mines, and reduced the total train holding capacity of these mines by a total of 19 trains. See BNSF Reply Narr. at III.B-16 to 30 and Table III.B-3.[16]

[16] BNSF appears to take issue with the fact that WFA/Basin's experts used the most recent version of BNSF's Guide to Coal Mines – the version posted on BNSF's (continued...)

Messrs. Reistrup and Smith have reviewed BNSF's narrative evidence on the operational train capacity of the PRB mines, as well as BNSF Reply Exhibit III.B-2 which contains marked-up versions of the mine track schematics. As a result of their analysis, Messrs. Reistrup and Smith accept BNSF's restatement of the operational train capacity at all of the mines except Buckskin, Caballo and North Antelope/Rochelle.

Rebuttal Table III-C-1 below compares the parties' calculations of the operational train capacities of each of the PRB mines served by the LRR. In some cases the operational capacity is the same as the physical capacity. The physical capacity of each mine's tracks is shown in the "WFA/Basin Op." column, as these numbers are from BNSF's Guide to Coal Mines.

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[16] (...continued)
website as of January, 2005 – rather than an earlier version produced by BNSF in discovery. BNSF Reply Narr. at III.B-18, n.21. BNSF also notes that the more recent (website) version of the Guide that appears in WFA's Opening hardcopy workpapers (starting at Vol. 7, p.04314) has an error because it states that Black Thunder Mine has three loop tracks whereas in fact it has two. Id. at III.B-20 to 21. WFA/Basin's experts certainly cannot be blamed for using the most recent publicly available version of BNSF's Guide to Coal Mines rather than an older version provided in discovery, but in any event they acknowledge that Black Thunder Mine has two loop tracks.

Rebuttal Table III-C-1 Comparison of Operational Train Capacity of PRB Mines				
Mine	**WFA/Basin Op.**	**BNSF**	**WFA/Basin Reb.**	**Difference[1/]**
Buckskin	4	3	4	1
Rawhide	2	2	2	0
Eagle Butte	3	3	3	0
Clovis Point	1	1	1	0
Fort Union[2/]	1	1	1	0
Dry Fork	3	1	1	0
Caballo	5	3	4	1
Caballo Rojo	4	3	3	0
Belle Ayr	4	2	2	0
Cordero	3	3	3	0
Jacobs Ranch	4	3	3	0
Black Thunder	8	4	4	0
So Black Thunder	4	3	3	0
N. Antelope/Rochelle	12	8	10	2
Antelope	4	3	3	0
Total	**62**	**43**	**47**	**4**

[1/] Number in "WFA/Basin Reb." column minus number in "BNSF Reply" column.

[2/] The LRR does not originate any traffic at Fort Union Mine during the 20-year DCF period.

Messrs. Reistrup and Smith explain below the reasons for the remaining differences between the parties involving the Buckskin, Caballo and North Antelope/ Rochelle Mines. The track diagrams for these mines as marked up by BNSF Witness Mueller, with notes added by Mr. Reistrup in red to show the actual operational train capacities, are included at pp. 00367-372 of WFA/Basin's Rebuttal Workpapers.

i. Buckskin Mine

On Opening, WFA/Basin's experts assumed Buckskin Mine would be able to accommodate four trains on site in the 2024 peak year. This includes the three-train capacity shown in BNSF's Guide to Coal Mines plus a fourth train due to the mine's planned construction of an additional track in 2005. BNSF's Witness Mueller reduced the present capacity of this mine from three trains to two but agreed to the inclusion of the new track, which raises the mine's operational capacity to three trains. BNSF Reply Narr. at III.B-21 to 22.

BNSF's schematic for the Buckskin Mine trackage, including the new track (denominated as "Proposed Loop Track Extension - Approx 9,000' ") is shown on page 1 of its Reply Exhibit III.B-2. A review of this schematic indicates that the addition of the new track enables four trains to be accommodated at one time, not three as Mr. Mueller states. One empty train can be held on the 7,763-foot "auxiliary track," and one empty train can be held on the proposed loop track extension. Two more trains can be accommodated on the loop track itself and on the existing track parallel to the proposed loop track extension (i.e., the track that has the "set out track" attached to it).[17] The loop track (E – E via H, G and F on the schematic) is 7,904 feet long and the existing track (E – C via D, J and I) is 8,784 feet long; thus each segment can easily accommodate the

[17] Mr. Mueller neglected to mention the existing track between E and C via D, J and I, much less that it is long enough to hold a loaded coal train while another train is in the process of loading.

LRR's longest coal train. One loaded train can proceed to exit the mine on the existing track (E – A via D, J, I, C and B) without interference from either of the two empty trains that are being held, while a fourth train behind it is loading. See WFA/Basin Rebuttal Workpapers, pp. 00368-369. Thus, the operational capacity of Buckskin Mine is four trains, not three as suggested by BNSF, and this capacity was assumed for purposes of the Rebuttal RTC Model simulation.

ii. Caballo Mine

On Opening, WFA/Basin's experts assumed capacity for five trains at Caballo Mine based on the information in BNSF's Guide to Coal Mines. BNSF states that Caballo's operational capacity is actually only three trains. BNSF Reply Narr. at III.B-23 to 24. However, this mine in fact has the operational capacity to accommodate four trains on site.

As shown on the schematic of the tracks at Caballo Mine (page 7 of BNSF Reply Exhibit III.B-2), each of the two loop tracks can accommodate an empty train south of the loading silos (i.e., between points C – D and C – N). According to BNSF Witness Mueller, the portion of the inner loop track north of the loading silos is too short to accommodate a loaded coal train without blocking the lead to the inbound loop tracks. BNSF Reply Narr. at III.B-24.[18] However, based on Mr. Mueller's handwritten notes on

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[18] Mr. Mueller did not mention the outer loop track (Track #4501) north of the loading silos. This track can accommodate one loaded train. Peabody Energy (the owner (continued...)

the Caballo track schematic, this assumes the loaded train has to clear the crossover just north of the loading silos (Point R on the schematic). There is no reason why loaded trains need to be held north of this crossover once they have completed loading. Furthermore, the schematic of the Caballo Mine trackage used by Mr. Mueller is not the current schematic. Mr. Reistrup's workpapers include both the older schematic used by Mr. Mueller and the current schematic, which indicates that the mine trackage has been extended and that Caballo Mine has a normal operational capacity of four trains (two loaded and two empty). See WFA/Basin Rebuttal Workpapers, pp. 00370-371.

iii. North Antelope/Rochelle Mine

On Opening, Messrs. Reistrup and Smith assumed the North Antelope/ Rochelle mining complex can accommodate 12 trains based on the information in BNSF's Guide to Coal Mines. BNSF Witness Mueller asserts that the operational capacity of North Antelope/Rochelle is only eight trains, due primarily to the need to keep the crossovers between the storage tracks and the loop tracks clear to facilitate the ingress and egress of trains and the need to keep one of the storage tracks (located on the upper

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[18] (...continued)
of Caballo Mine) confirmed to Mr. Reistrup that southbound loaded trains are normally loaded on the inner loop track, so that they can depart the mine without blocking access toward the north from the outer loop track.

right-hand portion of the schematic) clear for the departure of loaded trains.[19] BNSF Reply Narr. at III.B-19 to 20.

Mr. Reistrup has observed the operations at North Rochelle/Antelope Mine during his field trips to the PRB. He acknowledges the need to keep one of storage tracks clear for the departure of loaded trains. However, trains can be (and, according to Peabody Energy, often are) moved around on the mine trackage by the loading contractor before, during and after the actual coal loading process. Trains are moved to and from the two loading silos in a manner that may occupy (or block) one or more of the crossovers – but only temporarily. This enables at least two more trains than the eight suggested by BNSF Witness Mueller to occupy the mine trackage without disrupting the flow of trains to and from the mine. See WFA/Basin Rebuttal Workpapers, p. 00372. Accordingly, the operational capacity of the North Antelope/Rochelle Mine is ten trains, not eight as suggested by Mr. Mueller.[20]

Messrs. Reistrup and Smith directed WFA/Basin Witness Schuchmann to include capacity for the number of trains shown in the "WFA/Basin Reb." column of

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[19] The crossovers are circled on the copy of the track schematic for North Antelope/Rochelle included as page 15 of BNSF Reply Exhibit III.B-2. The same schematic, with Mr. Reistrup's added notes shown in red, is also included at p. 00372 of WFA/Basin's Rebuttal Workpapers. Note that the LRR is not constructing the southernmost of the two southerly wye legs at E. Nacco, shown by Mr. Mueller as for "south bound loads."

[20] The issue is actually moot, because the Rebuttal RTC simulation shows that a maximum of six LRR trains are on the North Antelope/Rochelle mine trackage simultaneously during the peak modeling period.

Rebuttal Table III-C-1 for purposes of the Rebuttal RTC simulation. This includes the adjustments discussed above for Buckskin, Caballo and North Rochelle/Antelope.

It should also be noted that the train capacities at the various PRB mines shown in Rebuttal Table III-C-1 reflect what is or will be in place by the end of 2005. This is a very conservative assumption for a simulation of operations in 2024. BNSF and UP have publicly projected huge growth PRB coal traffic over the next decade. Just as BNSF and UP are adding track capacity (and plan to add more capacity in the future) to accommodate this growth, so too the mines themselves will inevitably add track capacity to accommodate growth. Such additions are not reflected in the parties' RTC simulations.

In summary, the Board should not adopt BNSF's mine-capacity arguments as they are not supported by the best evidence of record in this case. WFA/Basin's evidence on the existing mine capacity to accommodate coal trains is buttressed by the reasonable expectation that the mines will add capacity in the years ahead. Even if the Board were to credit BNSF's evidence with respect to present mine capacity, adopting BNSF's position here would artificially and inefficiently constrain the LRR's peak-year performance in a manner that runs contrary to the intent of the SAC test.

c. <u>Random Outages</u>

WFA/Basin's operating experts included 19 random incidents that BNSF experienced in the 2004 peak period on the lines replicated by the LRR in their Opening

RTC simulation. This included nine operational outages and ten "trouble ticket" or track/signal-related incident reports.[21] WFA/Basin's experts assumed that similar operational outages and trouble-ticket incidents would occur at the same locations and for the same duration during the 2024 RTC simulation period. See WFA/Basin Op. Narrative at III-C-48 to 56.

BNSF agrees with the nine operational outages that WFA/Basin included in the RTC Simulation. BNSF Reply Narr. at III.B-31. However, BNSF asserts that WFA/Basin understated the number of track/signal trouble ticket incidents that should be included in the RTC simulation, and that a total of ten additional trouble ticket incidents should have been included (for a total of 20). Id. at III.B-31 to 35.

One of the ten additional trouble tickets that BNSF proposes to add (Ticket No. 221091 for { }) was, in fact, included in WFA/Basin's Opening RTC simulation. It is listed as Item No. 5 in WFA/Basin Op. Exhibit III-C-3; see also WFA/Basin Op. Workpapers Vol. 7, p. 04412. With respect to the remaining nine incidents that BNSF wants to add, after reviewing the additional information provided by BNSF Witness Mueller in the Reply

[21] Unlike operational outages, which directly affect train operations and require immediate attention, a trouble-ticket incident is not an outage as such. A trouble ticket simply means that a problem or potential problem that affects the track or signals, and that could affect train operations, has been reported to the dispatcher (usually followed up by a report of corrective action or, in many instances, that no corrective action was needed).

Narrative, and to narrow the differences between the parties, Messrs. Reistrup and Smith have concluded that two of them could be expected to occur on the LRR's lines in 2024 and therefore should be included in the Rebuttal RTC simulation. These include:

i. Ticket No. 225696 { }

As Mr. Mueller notes, Messrs. Reistrup and Smith included a similar trouble ticket item for a rail pullapart (No. 225711) in the RTC simulation. No. 225696 was inadvertently omitted and should also have been included as a "walk over" incident, meaning that after visual inspection and dispatcher approval, a crew member or MOW person watches and talks the train over the problem area by radio at 10 mph so that the train can be stopped if necessary.

Messrs. Reistrup and Smith note that in BNSF's RTC random outage file ("BNSF_REPLY_LRR_FINAL.FORM_B"), BNSF incorrectly entered this outage as { } with a speed of 0 mph. The { } description does not match the { } description on the trouble ticket itself. Moreover, for the other { } incident which both parties included in their RTC simulations (Ticket No. 225711), BNSF's RTC random outage file allowed operations at 10 mph through the affected area. Thus, WFA/Basin's treatment of Ticket No. 225696 as a 10 mph { } incident is consistent with BNSF's treatment of the similar incident for Ticket No. 225721.

ii. Ticket No. 218535 { }

Messrs. Reistrup and Smith agree with Mr. Mueller's explanation for this trouble ticket. It is included in the Rebuttal simulation as a "restricted speed" (10 mph) incident since something clearly was wrong with the signal.

The remaining seven trouble ticket incidents described by Mr. Mueller should not be included in the RTC simulation. These trouble tickets involved a variety of maintenance-type incidents that did not affect train operations to any material extent. When there is a definite impact on train operations, the incident shows up on the BNSF dispatcher reports as a "DPR [operating] Service Interruption"[22] in addition to being listed as a trouble ticket item. For example, the { } broken rail outage was listed as both a trouble ticket incident and an operating outage because it impacted train operations. See WFA/Basin Op. Narr. at III-C-54.

The seven disputed trouble ticket incidents are described below, together with Messrs. Reistrup's and Smith's explanation of why each incident should be excluded. Each of these trouble tickets is listed in WFA/Basin Op. Workpapers Vol. 7, p. 04415, and also in BNSF Reply electronic workpaper "SubOrinJan2004 to11-15-04.xls." Hardcopies of the trouble ticket spreadsheets with additional notes by Mr. Reistrup are included at pp. 00361-365 of WFA/Basin's Rebuttal Workpapers.

i. Ticket No. 217357 { }

The explanation provided in the trouble ticket for this incident was { }. Mr. Mueller assumed that as a result of the obstruction the signal at this location would have been red (BNSF Reply Narr. at III.B-32), but BNSF provided no documentation so indicating. This

[22] See WFA/Basin Op. Workpapers Vol. 7, p. 04395.

incident appears to be a maintenance item as the trouble ticket spreadsheet expressly indicates no train delays were occurred as a result. In addition, operating rules prohibit the use of locomotive sanders over switch mechanisms. FRA track inspections (at least twice per week on non-consecutive days) and signal/communications inspections, done properly with adjustment and lubrication as necessary, avoid such events.

ii. Ticket No. 218338 { }

The explanation provided in the trouble ticket for this incident was simply { }; no other details were provided. Mr. Mueller speculated that the explanation meant the switch points could not close, preventing them from completing the circuit and resulting in a red signal that would have affected train operations (BNSF Reply Narr. at III.B-32 to 33). There is no basis for this assumption, and there is no indication of any operational problems at all. A more plausible assumption is that the switch remained { } (the word used in the ticket) and that the field MOW (track) personnel noticed that the switch points were running, fixed them, and then reported the item to the dispatcher. The trouble ticket itself indicates that this was a { } item, and there is no indication that any trains were delayed.

iii. Ticket No. 220154 { }

The explanation provided in the trouble ticket for this incident was { }. A report of switch points { } does not necessarily mean they were hung up, thus affecting train movements through the switch. Proper inspection and preventive maintenance (including routine lubrication) should prevent this kind of problem. Mr. Mueller noted the Maintainer's report that one train was delayed, but there is no evidence that the delay lasted 65 minutes, as he asserted (<u>id.</u> at III.B-33). The reference to 65 minutes is simply a reference to the period of time the trouble ticket remained open – that is, the time that elapsed from the Maintainer's initial report of the incident until he reported that the incident had been resolved (in this instance, by lubricating the switch). This incident did not appear in the "DPR Service Interruptions" list of operating outages and there is no indication of the time of delay to the single train involved – it could have been simply a stop and proceed.

iv. Ticket No. 221867 { }

The explanation provided in the trouble ticket for this item was { }. Despite the reference to { }, Mr. Mueller leaped to the conclusion that the switch would not properly line for movement of a train and a red signal would have been encountered during the period of the "malfunction" (id. at III.B-33). The scanty information in the trouble ticket provides no basis whatsoever for these assumptions – nor is there any indication that any trains were delayed by this incident. A more probable explanation is that the dispatcher reported the switch in reverse (he must have tried to place it in "normal"), field personnel then lubricated the switch, and then reported { }. When field MOW forces perform proper preventive maintenance, running switch points are noted by the track inspector and then lubricated by a track crew, with no train delays.

v. Ticket No. 223320 { }

The explanation provided for this incident was { }. Mr. Mueller assumed this incident was similar to Ticket No. 221867 discussed above (id. at III.B-34). Messrs. Reistrup's and Smith's response is also similar: apparently the switch was working as intended when the field crew got there and lubricated the switch, and no train delays were reported as a result of this incident. The MOW rule book requires inspection after severe weather ({ }) and corrective action as necessary. The fact that { } switches were involved indicates that preventive lubrication was lacking.

vi. Ticket No. 223591 {
}

The explanation provided for this incident was {
}.
Mr. Mueller engaged in totally unsupported speculation about what this incident entailed (id. at III.B-34). However, since the switch was reported as lined {
}, i.e., doing what he was supposed to do in the normal course of his duties. There is no indication that this normal maintenance activity resulted in any train delays.

vii. Ticket No. 224711 {
}

The entire explanation provided in the trouble ticket for this incident was { }. Mr. Mueller assumed this incident was similar to Ticket No. 223591 discussed above, but again there is no explanation whatsoever of what the actual problem was, if any. The switch was reported as {
}, and there is no indication that any trains were delayed. This appears to be a routine light maintenance (lubrication) event.

In summary, other than Mr. Mueller's unsupported speculations, BNSF has not provided any evidence that would warrant inclusion of the seven trouble ticket incidents discussed above in the RTC Model simulation of the LRR's operations.

d. Time Requirements at LRS and Guernsey Yard

For purposes of their Opening RTC simulation, WFA/Basin's operating experts allotted eight hours of destination dwell time for the LRS trains. This included time for unloading coal, locomotive fueling/servicing, and bad order/spare car switching.

BNSF Witness Mueller disagreed with this time allocation. Instead, he proposed total dwell time at LRS of 19.38 hours. BNSF Reply Narr. at III.B-35 to 37.

Messrs. Reistrup and Smith also allocated 45 minutes of dwell time at Guernsey Yard for all loaded coal trains. Mr. Mueller disagreed with this time allocation for some loaded trains. Mr. Mueller proposed dwell time at Guernsey Yard of one hour for loaded trains that need to be fueled and 1.5 hours for trains that also have to have a fourth locomotive unit added. Id. at III.B-37 to 40.

Messrs. Reistrup and Smith agree that the train dwell time at LRS needs to be increased, but only to 12 hours. They have also added 15 minutes of dwell time at Guernsey Yard (increasing the total dwell time to one hour) for loaded trains to which a fourth locomotive unit is added.

i. Dwell Time at LRS

On Opening, Messrs. Reistrup and Smith allotted eight hours of dwell time for LRS trains at the power plant on the basis of (1) discussions with WFA/Basin employees during LRS site visits in late 2004 and early 2005, and (2) their analysis of how much time is actually needed for unloading each train and performance of the other functions that BNSF's contractor, QRS, performs at the plant on each train. The QRS functions include fueling the locomotives, checking/fixing brake shoes, conducting 1,500-mile car inspections as needed, switching out bad-order cars, and switching in spare/repaired cars. See WFA/Basin Op. Narr. at III-C-36 to 37 and Op. Workpapers Vol. 7, pp. 04175-176 and 04190-193.

In its reply evidence, BNSF asserts that its train movement data for the period from the fourth quarter of 2003 through the third quarter of 2004 indicate that the average time consumed between arrival of the loaded train at LRS and the "release" of the empty train was { } hours. BNSF Reply Narr. at III.B-36. Although BNSF did not mention this, its records also indicate that during the same 12-month period an additional { } hours, on average, occurred between the "release" of the train and its departure from LRS. See BNSF Reply electronic workpaper "minetime1.xls," tab "power plants." For purposes of its RTC simulation, BNSF allotted a total of { } hours of dwell time for each train at LRS ({ } hours from arrival to release and 1.5 hours from release to departure). BNSF Reply Narr. at III.B-57.[23]

After reviewing BNSF's reply evidence, Mr. Reistrup again discussed the unloading and QRS operations at LRS with the present LRS Operations Superintendent, David Herriott. Based on these discussions and spreadsheet data provided by Mr.

[23] BNSF states (id.) that the 1.5 hours of dwell time for empty trains between the completion of unloading and departure of the train is the same time assumed by WFA/Basin for purposes of its Opening RTC simulation. This is incorrect. The 1.5 hours shown in the model (actually, two hours as described in WFA/Basin's Opening Narrative) reflected the time required to complete the fueling, inspection and switching functions after the train is unloaded. Under WFA/Basin's operating plan, an LRR crew would be called and available to depart with the empty train immediately after the train is released by the unloading contractor (QRS).

Herriott, it is clear that the coal unloading operation and the other functions performed by QRS, combined, do not consume anything close to the { } hours that BNSF has alleged. Rather, the total time consumed averages about 12 hours per train, and the remaining { } hours probably represents additional time that BNSF uses to stage empty trains for movement to the mines before calling crews for these trains.

Accordingly, Mr. Reistrup, in consultation with WFA/Basin Witness Paul Smith, has allotted 12 hours of dwell time per train at LRS for purposes of the Rebuttal RTC Model simulation, of which seven hours are for unloading the train and five hours are for the performance of the QRS functions. Mr. Reistrup's explanation for allotting 12 hours of dwell time at LRS is set forth below.

The process at LRS after a loaded coal train arrives is as follows.[24] First, the BNSF crew places the first car of the train in position for the indexer to pull the train through the car dumper, sets the independent air on the locomotives to 3-4 pounds, and departs. LRS personnel then unload the train, using the indexer to move the train through

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[24] See WFA/Basin Op. Workpapers Vol. 7, pp. 04175-176 and 04190-192, which contain Messrs. Reistrup's and Smith's notes of their recent field trips to the PRB and LRS. Those descriptions have been amplified as a result of Mr. Reistrup's recent discussions with Basin Electric's David Herriott. Mr. Reistrup's notes of his conversations with Mr. Herriott and his analysis of the LRS dwell-time spreadsheet provided by Mr. Herriott are included at pp. 00336-359 of WFA/Basin's Rebuttal Workpapers.

the dumper. The unloading process itself usually takes less than seven hours (including time to fuel the rear DP locomotives, as described below).[25]

When 30 cars remain to be unloaded (i.e., car 116 on a 136-car train is in the dumper), the LRS unloading crew calls QRS, which usually arrives at the plant in less than an hour. Unloading stops before the last two cars on the train are dumped, and at that time the two rear (DP) locomotives are fueled by QRS using a tanker truck. (Note that the LRS trains require only one rear unit on the LRR, not two as required on BNSF, so the fueling process for the rear LRR unit takes less time.) After the rear unit is fueled the indexer pulls the last two cars through the dumper, which completes the unloading process. If another loaded LRS train has arrived at the plant, it can advance once the rear locomotive of the first train is out of the dumper.

While the last two cars are being unloaded, the QRS tank truck drives to the front of the train. When the train has been completely unloaded, the QRS truck fuels the two lead units and a QRS crew takes over to inspect and service the train. On every third cycle of each of the three LRS trainsets a 1,500-mile inspection is performed; any bad-ordered cars are switched out and moved to the on-site car repair facility; and spare/repaired cars are switched into the train (the switching is performed by a QRS

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[25] WFA's Rod Wolf informed Mr. Reistrup during his site visit to LRS that BNSF did not assess destination detention (demurrage) charges for unloading time that exceeded the 7 hours and 3 minutes of free time allowed under the rail transportation contract that was in effect through the third quarter of 2004. This confirms that unloading time rarely exceeded 7 hours.

engineer using the BNSF road locomotives). An air test is then performed by the QRS crew before it releases the train and departs. On the other two cycles, brake shoes and air hoses are inspected and repaired/replaced if necessary but switching ordinarily is not performed. The entire QRS process normally takes five hours on every third trip, when a 1,500-mile inspection and related car switching are performed in addition to fueling the locomotives. On the other two trips (i.e., two-thirds of the time), the QRS process normally takes 1.5 to 2 hours.

In addition to confirming the unloading and processing of trains at LRS, as described above, Basin Electric's Mr. Herriott also provided Mr. Reistrup with a spreadsheet, based on records kept by LRS plant personnel in the ordinary course of business, that shows the time spent to unload each BNSF coal train and the time spent by QRS to perform its fueling and other functions on each train during the most recent six months for which data are available (February through July of 2005). This spreadsheet is included as WFA/Basin Rebuttal electronic workpaper "LRS Dwell Time.xls." Mr. Reistrup's workpapers summarizing his analysis of the spreadsheet (which include a printout of it) are included in WFA/Basin Rebuttal Workpapers, pp. 00338-359.

Mr. Reistrup's review of the spreadsheet indicates that BNSF delivered a total of 218 loaded coal trains to LRS during this recent six-month period. With respect to unloading time, 122 trains, or 56% of the total, were unloaded in less than 7 hours. An additional 28 trains were unloaded in between 7 and 7.5 hours (as noted above, there is some overlap between unloading time and locomotive fueling time as the unloading process is interrupted while the rear DP units are fueled).

With respect to QRS time, 26 trains spent less than 2.5 hours from the completion of unloading through the release of the train by QRS, and 137 trains (or 65% of the total trains) spent less than five hours for the QRS process. An additional 30 trains spent between five and six hours for this process, which means that 77% of the total trains spent less than six hours in QRS's possession. Mr. Reistrup notes that the number of trains that spent more than five hours in QRS's possession was abnormally high during the period covered by the Basin Electric data because of extraordinary delay problems beginning in May 2005, when two coal-train derailments occurred on the Joint Line, and train movements slowed to a standstill.[26] Basin Electric's David Herriott reports that, from mid-May through July 2005, LRS received half the normal number of deliveries per trainset. Since empty LRS trains were not going anywhere for days on end during this period, BNSF used the LRS plant trackage to hold empty trains for delayed movement to the mines – there was no urgency on the part of either QRS or BNSF to complete the QRS processing of the trains and release them in a timely manner.

[26] In fact, both BNSF and UP declared force majeure under their PRB coal transportation contracts following these May 2005 derailments, and as has been widely publicized, train operations in the PRB have not returned to normal as of mid-September 2005.

The facts, as described above, are based on records kept in the ordinary course of business by LRS plant personnel. The facts are inconsistent with BNSF's claim that the average time between arrival of the loaded train at LRS and its release as an empty train back to BNSF is { } hours. This is the amount of time shown in BNSF's electronic workpaper ("minetime1.xls," worksheet "power plants") from "Arrive to Release." However, the workpaper does not define the term "release," and BNSF's underlying train event data produced in discovery do not define it either. However, given the facts, it is apparent that BNSF's use of the term "release" means something other than the time of release of the empty train by QRS back to BNSF. The "release" time as BNSF uses it undoubtedly includes time after QRS has finished processing the train, i.e. time that elapses after the departure of the QRS personnel, when the empty train sits at LRS waiting for an outbound BNSF crew to arrive.[27]

On the basis of the facts known to them (including their observation of the coal unloading process at LRS and their discussions with LRS plant personnel), Messrs. Reistrup and Smith have concluded that it is reasonable to allot a total of 12 hours of dwell time for LRS coal trains at LRS. This includes seven hours for LRS plant

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[27] Alternatively, one could speculate that QRS does not release the empty train to BNSF for several hours after it completes processing the train because it knows BNSF will not immediately bring a crew to LRS to move the train to the mine for loading. The LRR will not operate in this manner; it will call a crew prior to completion of the QRS process so that the crew will be ready to Board the train as soon as that process is completed. The LRR would work with QRS to minimize the dwell time of empty trains at LRS and keep them moving.

personnel to unload the train and five hours for QRS to complete fueling, inspections and switching (in fact, 1,500-mile inspections and switching occur only once every three trips).[28] This represents an increase of four hours from the total LRS dwell time allotted on Opening, but it is significantly less than the dwell time BNSF proposes to allot.

Messrs. Reistrup and Smith further note that, unlike BNSF, they have not added an additional 1.5 hours between empty-train release and departure to the time between arrival and release. As an efficient, least-cost operator, the LRR will call crews before QRS releases the train, so that the crew is on-site and ready to depart LRS with an empty train as soon as the release occurs. This is consistent with the procedure used in calling crews at crew-change and interchange points; see WFA/Basin Op. Narrative at III-C-44 to 45.[29]

ii. Dwell Time for Loaded Trains at Guernsey Yard

Under the LRR's operating plan, numerous coal trains are interchanged between the LRR and the residual BNSF at Guernsey. WFA/Basin's operating experts allotted six hours of dwell time at Guernsey Yard for empty coal trains and 45 minute of dwell time at Guernsey Yard for loaded coal trains. BNSF accepted the six hours of

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[28] The five hours allotted for servicing the empty trains at LRS is consistent with the six hours allotted for empty trains at Guernsey Yard. The six hours at Guernsey includes two hours of staging and other "stand-around" time, which need not be allotted at LRS. See WFA/Basin Op. Narr. at III-C-42 to 23. BNSF accepted the six hours of empty-train dwell time at Guernsey; see BNSF Reply Narr. at III.B-45.

[29] BNSF has accepted the crew-change and interchange times reflected in WFA/Basin's operating plan. BNSF Reply Narr. at III.B-45.

dwell time at Guernsey for empty trains; see BNSF Reply Narr. at III.B-45. It also accepted the 45 minutes of dwell time at Guernsey for loaded trains that do not require either fueling or the addition of a fourth locomotive unit (id. at III.B-37). However, BNSF proposes to add 15 minutes to the dwell time of each train that requires fueling at Guernsey (for a total dwell time of one hour), and an additional 30 minutes to the dwell time of each loaded train that requires the addition of a fourth locomotive (for a total dwell time of 1.5 hours). BNSF Reply Narr. at III.B-38 to 40.

Under the LRR's operating plan, all empty trains received in interchange from BNSF at Guernsey are fueled at Guernsey Yard in the empty direction. Most of these trains have enough fuel left in their tanks so that they do not require re-fueling when they return to Guernsey in the loaded direction. However, the locomotives on loaded trains that operate to BNSF destinations south of Pueblo, CO, do not have enough fuel in their tanks to make it to the next BNSF fueling point (i.e., Amarillo, TX). Therefore, WFA/Basin's operating plan provides for re-fueling these locomotives – and only these locomotives – in the loaded direction at Guernsey. See WFA/Basin Op. Narr. at III-C-64 to 65.

In addition, BNSF uses four road locomotives in a 2/2 DP configuration on coal trains destined to points south of Denver. These trains do not need four locomotives while on the LRR, so under the operating plan the fourth unit is removed from the empty train upon arrival at Guernsey Yard, and a fully fueled and serviced unit is added to the loaded train when it arrives back at Guernsey Yard. Id. at III-C-31 to 32.[30]

Messrs. Reistrup and Smith provided 45 minutes of dwell time for loaded coal trains at Guernsey regardless of whether they need either fueling or the addition of a fourth locomotive. This includes 15 minutes for topping off the locomotive fuel tanks and 30 minutes for the interchange crew-change. Messrs. Reistrup and Smith also indicated that the fourth locomotive could be added during the half-hour allotted for the crew change. They disagree that any additional time needs to be allotted for re-fueling, but they have concluded that, to be conservative, an additional 15 minutes should be provided for the addition of a fourth locomotive.

With respect to loaded trains that require re-fueling only, although BNSF did not necessarily agree with the exact number of gallons needed by each locomotive (BNSF Reply Narr. at III.B-38), it did not dispute the 15-minute time for topping off the tanks. Nor did BNSF dispute the allotment of 30 minutes for the crew change. However, BNSF Witness Mueller asserts that an additional 15 minutes are required for fueling because (1) blue flag protection must be provided before fueling can begin and (2) "the access to the rear locomotive with the fuel truck will frequently be blocked by other loaded trains arriving and empty trains departing." Id. Taking these points in reverse

[30] In WFA/Basin's Rebuttal RTC simulation, 75 loaded trains require both fueling and the addition of a fourth locomotive at Guernsey. Two additional trains are fueled in the loaded direction but do not have a fourth locomotive added. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls," tab "Peak_Loaded_Trains," columns AM and AN.

order, Mr. Mueller provided no support for his assumption that the tanker truck's access to the rear (DP) unit would "frequently" be blocked, nor did he define "frequently." The blockage assumption is based on nothing but sheer conjecture by Mr. Mueller. In fact, most of the time the tanker truck will be standing-by between the two tracks leading to the mainline fueling facility where the two lead units will be fueled, and will have to move a few feet at the most to begin fueling the rear DP unit.

Mr. Mueller is correct that blue flag protection must be provided before fueling can begin, but this takes no more than five to ten minutes at the most. To the extent that the fueling time (including the provision for blue-flagging) extends beyond 15 minutes, the train can remain under blue flag protection longer because an additional 30 minutes have been allotted for the crew change. Crew members can entrain and detrain while the train is under blue flag protection; the only requirement is that the train (and individual locomotives and cars) not be moved while it is under such protection. Thus, 45 minutes is ample total time for both fueling and crew change.

With respect to loaded trains that also require the addition of a fourth unit at Guernsey (an average of six trains per day during the RTC simulation period), Mr. Mueller added an extra half hour of dwell time to add the fourth unit because (1) it cannot be added during the fueling process due to the need for blue flag protection, and (2) additional time is needed to "coordinate the movement out of the yard and back into the yard on the mainline fuel tracks, in conjunction with all the other loaded trains arriving and empty trains departing" and the need to link this unit (which is a DP unit) to the DP unit already on the train. BNSF Reply Narr. at III.B-40. Mr. Mueller's testimony indicates he does not understand the process the fourth road unit undergoes at Guernsey Yard.

First, this unit will have been fueled and serviced at the LRR's separate locomotive fueling/servicing facility inside Guernsey Yard after its arrival at Guernsey on (and removal from) a prior empty train. It does not need to be fueled after it is put on an outbound loaded train. It merely needs to be added to the rear of the train and linked to the other rear DP unit that is already on the train.

Most of the time, this can be accomplished immediately upon arrival of the loaded train at Guernsey Yard. The yard personnel know which arriving loaded trains require the addition of a fourth unit. One of the Guernsey switch locomotives will be standing by at the west end of Guernsey Yard, coupled to the extra road unit. As soon as the loaded train comes to a stop with the two lead units positioned on the mainline fueling pad, the switch engine immediately couples the additional road locomotive to the rear of the train and leaves. The blue flags then go up, and fueling of the other DP units (and the lead units) commences. The process of adding the fourth unit takes a few minutes at the most, and does not materially delay the fueling process for the other locomotives on the train.

If, occasionally, the fourth locomotive's immediate access to the rear of the loaded train is blocked for more than a few minutes due to another train movement at the west end of Guernsey Yard, it can be added after fueling is completed, during the half-hour allotted for the crew change. Given virtually instant communications and the close coordination of yard movements that are hallmarks of modern railroading, there is no reason why both fueling of the locomotives already on the train and the addition of a fourth road locomotive cannot be accomplished in the 45 minutes of dwell time allotted for loaded trains at Guernsey Yard. The crew change can be completed at any time during the process.

For these reasons, Messrs. Reistrup and Smith believe that the LRR should be able to fuel and add a fourth locomotive unit to loaded trains within the 45 minutes of dwell time they originally allotted at Guernsey. However, they recognize that the time is tight, given that a brake test is required for the entire locomotive consist after the fourth locomotive is added. Therefore, and to be conservative, they instructed Mr. Schuchmann to add 15 minutes to the dwell time of the loaded RTC study trains that require the addition of a fourth unit (a total of 75 trains during the 13-day RTC simulation period). This increases the Guernsey dwell time for these trains to one hour.

e. Failure to Remove Helper Locomotives

WFA/Basin's operating plan provides helper service for loaded trains moving north from mines served by the Orin and Reno Subdivisions to the BNSF interchange at Campbell. The northbound helper district extends from MP 15.4 to MP 7.8 on the Orin Subdivision. See WFA/Basin Op. Narr. at III-C-17 to 18. BNSF notes that for seven trains receiving helper service in this district in the Opening RTC simulation, WFA/Basin failed to remove the helper locomotives at MP 7.8 and instead left them on the train until they arrived at Campbell. BNSF Reply Narr. at III.B-42 to 43.

WFA/Basin's operating experts acknowledge this inadvertent mistake in the Opening RTC simulation. In the Rebuttal RTC simulation Mr. Schuchmann removed the helpers on these trains at MP 7.8 on the Orin Subdivision rather than allowing them to stay on the trains to Campbell (see BNSF Reply Narr. at III.B-44). However the agreed 15 minutes for detaching these helpers was accounted for in the Opening (and thus also in the Rebuttal) simulation; i.e., Mr. Schuchmann simply failed to reduce the helper count from 2 to 0 at MP 7.8 in the Opening simulation.

BNSF also notes that WFA/Basin did not provide helpers on 11 trains that required helper assistance in BNSF's RTC simulation, due in part to the erroneous elevations/grades in the Opening RTC Model and in part to the substitution of the actual Scherer trains that moved during the 2004 peak period rather than treating all of the Scherer trains as new trains. BNSF Reply Narr. at III.C-11. For purposes of the Rebuttal RTC simulation WFA/Basin's operating experts corrected the erroneous elevations and substituted the Scherer trains included in BNSF's RTC simulation for the Scherer trains modeled on Opening. They concur with BNSF's conclusion that providing helper service for the additional trains does not require adding any helper locomotives or creating a new helper district. Id.

f. Results of WFA/Basin's RTC Simulation

WFA/Basin's RTC expert, Walter Schuchmann, re-ran the RTC Model after making the technical corrections to the LRR system described in Part III-B-3, revising the RTC train list as described in Part III-C-1-a above, and revising several of the operating inputs as described in Part III-C-2-a to III-C-2-e above. Except for the technical changes and the disabling of some tracks at the mines to account for the changes in operational train capacity agreed to by WFA/Basin, the LRR's track network as represented in the Model remains exactly as before. (The network is shown in WFA/Basin Op. Exhibit III-C-4.) As expected, the Model ran to completion with all of the revised inputs.

The electronic files containing the Rebuttal RTC Model run, output and case files are included in WFA/Basin's Rebuttal workpapers as Part III-C electronic workpaper folder "RTC." As noted in Part III-B-3-b above, Mr. Schuchmann used the most recent available version of the RTC Model, Version RTC 2.60 L79Q, for the revised model run. WFA/Basin understand that, like the updated version of the RTC Model used in BNSF's Reply simulation, Version L79Q has not been retained by Berkeley Simulation Software. Accordingly, WFA/Basin are providing copies of this version to the Board (and BNSF) in Rebuttal electronic workpaper file "RTC26L79Q.ZIP."

WFA/Basin's revised RTC Model run resulted in average LRR train cycle times that are slightly higher than those resulting from WFA/Basin's Opening RTC simulation, but lower than those resulting from BNSF's Reply RTC simulation. Rebuttal Table III-C-2 below contains a comparison of BNSF's average actual cycle times for the same movements during the one-year period from 4Q04 through 3Q04 and during the peak period of 2004 with the LRR's peak-period 2024 cycle times produced by WFA/Basin's Opening, BNSF's Reply and Rebuttal RTC simulations. This table is similar to Table III-C-7 on page III-C-58 of WFA/Basin's Opening Narrative, except that columns have been added to reflect the LRR's peak train cycle times from the Reply and Rebuttal RTC simulations.

More details concerning the numbers in Rebuttal Table III-C-2 are provided in WFA/Basin Rebuttal electronic workpaper "Cycle Time Comparisons.xls." The LRR trains moving to/from each mine are shown in WFA/Basin Rebuttal electronic workpaper file "LRR Rebuttal Operating Statistics.xls."

Rebuttal Table III-C-2 BNSF and LRR Train Cycle Times (Hours)					
Movement	**BNSF Avg.[1/] (2004)**	**BNSF Peak (2004)**	**LRR Peak (Op.)**	**LRR Peak (Reply)**	**LRR Peak (Reb.)**
1. Guernsey to Campbell Sub mines and return	{ }	{ }	28.0	30.2	28.9[3/]
2. Moba Jct. to Campbell Sub mines and return	{ }	{ }	33.4	47.2	35.8[4/]
3. Donkey Creek to North Antelope/Rochelle Mine and return	{ }	{ }	12.3	14.3	12.6[5/]

[1/] Average actual BNSF train cycle times during the one-year period from October 1, 2003 through September 30, 2004, including actual dwell time in the empty direction at the interchange point or LRS and actual dwell time at the mine. Time for the movements in Line 1 was based on a total of four observations. Time for each of the movements in Lines 2 and 3 was based on approximately 30 observation samples.

[2/] { }

[3/] Includes six hours of dwell time at Guernsey Yard in the empty direction and up to one hour in the empty direction, and six hours of dwell time at the mines.

[4/] Includes 12 hours of dwell time at LRS, 0.5 hours of dwell time at Moba Jct. for empty interchange trains, and six hours of dwell time at the mines.

[5/] Includes 0.5 hours of dwell time at Donkey Creek in the empty direction and 5.5 hours of dwell time at the mine.

In its reply evidence BNSF included an electronic spreadsheet comparing the transit times between various LRR O/D pairs produced by its reply RTC simulation and WFA/Basin's Opening RTC simulation. See BNSF Reply electronic workpaper "LRR Annual Statistics (BNSF Reply).xls," tab "Transit Times." In order to complete the picture, WFA/Basin have added the transit times resulting from its Rebuttal RTC simulation to BNSF's spreadsheet. See WFA/Basin Rebuttal electronic workpaper "Comparative Transit Times.xls." The transit times resulting from the Rebuttal RTC simulation have been used to calculate revised peak-week operating statistics, which have been used in developing revised annual operating expenses for the LRR. The LRR's revised operating expenses are discussed in Part III-D below.

3. Other

BNSF has accepted all of the other aspects of WFA/Basin's operating plan for the LRR, including the locomotive fueling plan, the car inspection locations and procedures, the train control and communications system, and the dispatching districts. See BNSF Reply Narr. at III.C-19 and WFA/Basin Rebuttal Exhibit III-C-1.

As described in Rebuttal Exhibit III-C-1, BNSF has also accepted the LRR's crew districts, crew-change points, and crew sizes. BNSF has also largely accepted Basin's proposed supervisory and field staffing for the LRR's transportation and mechanical departments. The only staffing difference between the parties that relates to the operating plan is whether crew haulers are needed. This is discussed in Part III-D-3-a below.

III-D Operating Expenses

III. D. OPERATING EXPENSES

The parties differ by $72.5 million with respect to the LRR's annual operating expenses for the first year of operations (4Q04 through 3Q05), which is hereinafter referred to as "2004" or the "base year." The differences are summarized, in descending order of magnitude, in Rebuttal Table III-D-1 below.

Rebuttal Table III-D-1
LRR 2004 Operating Costs
($ millions)

Item	WFA/Basin-Opening	BNSF Reply	Difference	Percentage
Train & Engine Personnel	$ 16.92	$ 29.58	$ 12.66	17.5%
Training & Start-up	$ 0.00[1/]	$ 12.27[1/]	$ 12.27	16.9%
General & Administrative	$ 15.01[2/]	$ 26.88	$ 11.87	16.4%
Locomotive Operating Expense	$ 26.22	$ 37.55	$ 11.33	15.6%
Maintenance of Way	$ 9.21[3/]	$ 19.75	$ 10.54	14.5%
Locomotive Maintenance Exp.	$ 9.58	$ 13.40	$ 3.82	5.3%
Railcar Lease Expense	$ 2.67	$ 6.14	$ 3.47	4.8%
Insurance	$ 3.77	$ 6.94	$ 3.17	4.4%
Locomotive Lease Expense	$ 13.56	$ 15.64	$ 2.08	2.9%
Other	$ 11.78	$ 13.11	$ 1.33	1.7%
Total	**$108.78**	**$181.26**	**$ 72.48**	**100.0%**

[1/] WFA/Basin capitalize training and start-up costs. BNSF treats these costs as an operating expense in the first quarter of the base year.

[2/] In the table on p. 202 of its Reply Narrative, BNSF shows $14.8 million for WFA/Basin's Opening G&A expense. BNSF subtracted $0.2 million from WFA/Basin's number related to annual training.

[3/] In the table on p. 202 of its Reply Narrative, BNSF shows $9.9 million for WFA's Opening MOW expense. That number is for 2024; BNSF neglected to make the peak-year to base-year adjustment.

The source of BNSF's calculation of base-year operating expenses shown in the above table is BNSF's operating-expense spreadsheet, included in BNSF's Reply electronic workpapers as "III D Operating Expense.xls." WFA/Basin note that the base-year operating expenses used in BNSF's DCF model (BNSF Reply Exhibit III.H-1) equal $172.2 million, or $9.0 million more than the amount shown in BNSF's operating expense spreadsheet. The reason for the difference is that BNSF used its "cross-subsidy" scenario expenses rather than its operating expenses for the entire LRR system and complete traffic group, thereby understating base-year operating expenses by $13.4 million.[1] As explained in Part III-A-3-c above, BNSF's cross-subsidy argument is wrong and it is inappropriate to reduce the LRR's annual operating expenses on a formula (or any other) basis.

In the following discussion WFA/Basin address the difference between the LRR's annual operating expenses shown in their opening evidence and the annual operating expenses that appear in BNSF's operating-expense spreadsheet, rather than those used in its DCF model. Before turning to the specifics with respect to the various categories of operating expense, however, one further introductory note is in order.

BNSF's calculation of annual operating expense is completely out of line with the annual SARR operating expenses as determined by the Board in its most recent

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[1] This difference is reduced to $9.0 million as the operating expenses are increased for inflation over the four quarters of the base year.

PRB coal rate cases, TMPA and Xcel. WFA/Basin's calculation, on the other hand, is in line with the decisions in these cases. This is demonstrated by the following table which compares the SARR base-year operating expense per track mile as determined by the Board in TMPA I and Xcel I with the parties' calculations of base-year LRR operating expense per track mile in this case.

Rebuttal Table III-D-2
SARR Base-Year OE Per Track Mile

Item	TMPA I	Xcel I	LRR-BNSF	LRR-WFA/ Basin Reb.
Track Miles	2,243.70	679.07	462.53	446.36
Operating Expense[1/] ($ millions)	$382.65	$149.40	$168.90	$110.75
OE per track mile	$158,912	$220,000	$365,166	$248,153

[1/] Excludes startup and training costs.

The numbers in this table are telling, particularly the comparison between the Board's findings in Xcel I and the parties' evidence in this case. Although the Xcel SARR has 47 percent more track miles than the LRR (and 69 percent more route miles), its total annual operating expense as determined by the Board is nearly $20 million lower than the LRR's annual operating expense as calculated by BNSF. On the other hand, WFA/Basin's Rebuttal operating expense per track mile is considerably higher than the Xcel figure. It is clear from this comparison that WFA/Basin's operating-expense calculation is reasonable, while BNSF has inflated the LRR's operating expenses to extreme levels in an attempt to justify its massive rate increase on the LRS traffic.

1. Locomotives

a. Leasing

i. Calculation of Lease Amount

BNSF states that it has accepted both WFA/Basin's assumption that the LRR would lease all of its locomotives, and WFA/Basin's annual lease cost of ${ } for SD70MAC locomotives and ${ } for SD40-2 locomotives. See BNSF Reply Narr. at III.D-1. However, BNSF's statement of acceptance is misleading and disingenuous with respect to SD70MAC locomotives.

On Opening, WFA/Basin relied on an annual lease cost of { } for SD70MACs based on the stream of payments from the most recent SD70MAC locomotive lease produced by BNSF in discovery discounted by the RCAF-A. This BNSF lease provides for { } However, because the DCF model indexes operating expenses to account for future inflation, the average annual lease payment cannot be used as the base-year lease expense. The Board rejected the use of an average annual lease payment for this reason in TMPA I at 79.

To account for the inflation applied by the DCF model, on Opening WFA/Basin discounted each semi-annual lease payment by the RCAF-A, so that the base-year annual lease payment used in WFA/Basin's DCF model would produce a stream of payments that reflect the actual lease payments from the BNSF lease.[2] This adjustment is necessary to reflect the fact that the later payments within BNSF's lease {

} WFA/Basin performed this adjustment so that it would not be necessary to modify the DCF model to treat inflation differently for locomotive costs. The method used by WFA/Basin is nearly identical to that used by BNSF in the Public Version of its Reply Evidence in AEP Texas (Docket No. 41191 (Sub-No. 1), filed May 24, 2004, and discussed in the Public Version of AEP Texas' Rebuttal Evidence filed July 27, 2004, at pp. III-D-5 to 6.

The inflation index used to discount lease payments to base-year dollars must be the same inflation index that is used to inflate operating expenses in the DCF model. If a different inflation index is used to discount the stream of lease payments, then the DCF model will inflate the base-year lease payment to something different than what BNSF will actually pay in the future under the terms of the lease.

BNSF made no attempt to match the inflation indexes used to develop the base-year lease expense with that used in its DCF model. As BNSF's DCF model uses an inflation index that is far higher than the 0.59 RCAF index, it greatly overstates the

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[2] WFA/Basin note that on Opening they inadvertently used the RCAF-A to discount the semi-annual locomotive lease payments rather than the actual inflation index used in their DCF model to inflate operating expense. On Rebuttal, WFA/Basin use the same 0.59 RCAF-U index to discount the semi-annual locomotive lease payments that they use in their DCF model to calculate the base-year locomotive lease payment.

locomotive lease payments over the life of the model. Had BNSF used the inflation index from its own DCF model to discount locomotive lease payments, the resulting base year SD70MAC lease payment would have been { }, not the { } calculated by WFA/Basin in their opening evidence.[3] BNSF's use of the { } base year locomotive lease expense combined with the inflation factors used in its DCF model results in total payments of {

}. Id.

Using the inflation index from WFA/Basin's Rebuttal DCF model yields a base year lease payment of { }. This is the base year locomotive lease expense used by WFA/Basin on Rebuttal.

ii. Number of SD70MAC Locomotives Required

The only remaining difference between the parties' lease costs relates to their disagreement as to the number of SD70MAC road locomotives required.[4]

WFA/Basin demonstrated in Part III-C-1-c-ii above that the LRR needs a total of 104 SD70MAC locomotives in the peak year. Using the agreed (and Board-approved) tonnage-ratio method of reducing peak-year locomotive requirements to base-year locomotive requirements, this translates to 96 SD70MAC locomotives in the base

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[3] See WFA/Basin Rebuttal electronic workpaper "Restate BNSF Loco Lease.xls."

[4] The parties agree that the LRR requires 13 SD40-2 locomotives for helper, switching and work train service. Id.; see also BNSF Reply Narr. at III.C-6.

year. Thus, the total locomotive lease expense in the base year (including both the SD70MACs and the agreed-upon 13 SD40-2 locomotives) equals $11.3 million.

b. Maintenance

Locomotive maintenance costs have two components: a cost based on the number of locomotive unit miles ("LUMs") and a cost based on periodic overhauls of each locomotive. BNSF has accepted WFA/Basin's maintenance cost per LUM for both SD70MAC and SD40-2 locomotives. BNSF Reply Narr. at III.D-2. It disagrees with WFA/Basin's overhaul costs in two respects. First, BNSF states that WFA/Basin have omitted the cost of upgrading the LRR's locomotives to meet the EPA Tier II compliance level for omissions. Id. at III.C-2 to 3. Second, BNSF states that the overhaul cost used by WFA/Basin is for material cost only, and omits the labor cost associated with overhauls. Id. at III.D-3 to 4.

SD70MAC overhauls. As an initial matter, both parties mistakenly used a { } annuity for SD70MAC overhauls, despite the BNSF-EMD contract's stipulation that overhauls occur { }. Had WFA/Basin or BNSF used { } years, the annuity factor would have been { } used by WFA/Basin and BNSF. Since the annuity factor is divided into the cost per overhaul to develop an annual cost, usage of the correct annuity factor would reduce each party's overhaul costs by { } percent. In order to minimize disagreement, WFA/Basin continue to use a { } year annuity on Rebuttal.

For the labor component of SD70MAC overhauls, BNSF accumulated costs associated with labor, payroll additives, and overhead in an electronic workpaper file called "EMD Overhauls.xls," which BNSF provided as part of its Reply variable cost evidence. The costs total { } in labor per overhaul, of which { } is overhead. The total labor is { } when indexed to 4Q04. While BNSF's estimates are almost completely undocumented and WFA/Basin are unable to determine the relevance to the LRR of the { } of overhead, WFA/Basin nevertheless accept BNSF's labor estimate in order to minimize disagreement between the parties.

WFA/Basin also accept the inclusion of { } for EPA emissions kits. However, WFA/Basin disagree with the method by which BNSF calculated costs associated with these kits. BNSF embeds the kits within the price of each overhaul, so that the LRR would effectively buy new emissions kits every { } years when, in fact, the kit is installed only one time, i.e. during the first overhaul. See BNSF Reply electronic workpaper "epa locomotive emission regs 1.pdf." In order to correct this problem, WFA/Basin have developed a weighted average locomotive annuity payment for SD70MAC overhauls. Payments are weighted by the number of years out of the 20-year DCF period that are applicable to that annuity. The EPA emissions kits are applicable to the first { } years of the DCF before the first overhaul. The { } of the second overhaul is applicable to only to the { } years of the DCF period before the second overhaul. Neither the cost of the emission kit nor the second overhaul premium is applicable to the last { } years of the DCF period. The appropriate weighting is therefore:

1. { }
2. { }
3. { }

In this manner, WFA/Basin incorporate both the cost of the EPA emissions kit and the price premium of the second overhaul kit into the annuity cost of SD70MAC overhauls, without modifying the DCF model to treat SD70MAC overhaul annuities differently from other costs.[5]

WFA/Basin disagree, however, with BNSF's use of BNSF invoices as the basis for the materials cost to be included in the SD70MAC overhauls. BNSF used 2005 invoices to develop its estimates for SD70MAC overhaul costs. In discovery, WFA/Basin requested BNSF to produce "any BNSF locomotive repair records and/or reports." However, BNSF failed to provide the invoice it relied on in its reply evidence notwithstanding this request. See WFA/Basin Request for Production No. 29, included in WFA/Basin's Rebuttal Workpapers, pp. 00374-376. BNSF should not be permitted to use as evidence materials that were requested in discovery but not made available to WFA/Basin for its Opening evidence. See Xcel I at 92-93.

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[5] See WFA/Basin Rebuttal electronic workpaper "LRR Loco Maintenance Reb.xls."

On Opening, WFA/Basin based the LRR's locomotive overhaul costs on the BNSF-EMD contract, not on invoices. There is no reason to believe that the LRR would pay more for materials than what is in the contract. On Rebuttal, WFA/Basin continue to utilize the contract price for maintenance materials relied on in their Opening evidence.

SD40-2 overhauls. On Opening, WFA/Basin based the LRR's SD40-2 locomotive maintenance costs on a BNSF-Alstom maintenance agreement Unlike SD70MAC's, { }. On Reply, BNSF generally agrees with WFA/Basin's SD40-2 maintenance costs but adds an annuity charge for the cost of EPA emissions kits. WFA/Basin disagree with this additional cost. As in the case with SD70MAC emissions kits, BNSF is assuming that the LRR will buy emissions kits for SD40-2's every { } years, even though the kits are only necessary at the first overhaul.

In addition, the EPA regulations regarding the emissions standards do not require locomotives manufactured prior to 1973 to be retrofitted with the emissions kits. See BNSF Reply electronic workpaper "epa locomotive emission regs 1.pdf." The SD40 lease relied on by WFA/Basin and accepted by BNSF on Reply is a BNSF lease agreement with Montana Rail Link ("MRL"). Nearly all of MRL's SD40 locomotives were manufactured prior to 1973 and are therefore exempt from the EPA emission standards. See WFA/Basin Rebuttal Workpapers, pp. 00377-389.

c. **Servicing**

BNSF has accepted WFA/Basin's locomotive servicing (sanding and lubrication) cost per LUM for road and helper locomotives. BNSF Reply Narr. at III.D-5. However, BNSF disagrees that this cost should be applied to switching and work-train locomotives because switch and work train locomotives travel limited distances compared to road and helper locomotives and because BNSF separately reports a cost for yard locomotive servicing in its R-1. BNSF applies a much higher cost per LUM for these locomotives ({ }, compared to { } for road and helper locomotives) to LUMs for yard switching and work-train service.

WFA/Basin accept BNSF's application of a separate servicing cost for switch locomotives, but disagree with BNSF's application of this cost to work train locomotives. To derive the servicing cost for switch and work train locomotives, BNSF divided the operating expense for Yard Operations-Locomotive Servicing from Schedule 410 of its 2004 R-1 Annual Report by the locomotive unit miles for yard switching from Schedule 755.

According to 49 C.F.R. Part 1201, the operating expense accounts within the Yard Operations subactivity apply only to activities within yards or terminals. See WFA/Basin Rebuttal Workpapers, pp. 00427-429. All other train-related operating expenses are captured by the Train Operations subactivity. The costs associated with work trains are generally not incurred within yards or terminals; therefore, the servicing expense should be associated with the Train Operations operating expenses, not Yard Operations.[6] As a result, WFA/Basin continue to use the lower, $0.0701 cost per LUM applicable to Train Operations for servicing work train locomotives, rather than the $0.647/LUM rate applicable to Yard Operations.

d. <u>Fuel</u>

BNSF has accepted WFA's locomotive fueling plan. BNSF Reply Narr. at III.D-6. Under that plan, all locomotives that pass through Guernsey are fueled at the LRR's Guernsey Yard. Locomotives on the local LRS trains are fueled by "DTL service" (tanker truck) at the power plant. Locomotives on trains interchanged with the residual BNSF at locations other than Guernsey are fueled by BNSF and the LRR pays BNSF per fuel on a proportionate per-LUM basis. <u>Id.</u>; <u>see</u> <u>also</u> WFA/Basin Op. Narr. at III-C-62 to 67 and III-D-6.

WFA calculated both fuel costs and fuel consumption on a BNSF system-average basis. BNSF disagrees that system-average figures are appropriate and substitutes substantially higher costs per gallon and substantially higher consumption rates. <u>See</u> BNSF Reply Narr. at III.D-6 to 12 (cost) and III.D-12 to 17 (consumption).

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[6] In fact, as shown in BNSF Reply electronic workpaper "III D Operating Expense.xls," BNSF assumed that wok trains travel 125 miles each crew shift. This distance clearly does not occur within yards or terminals.

i. **<u>Fuel Cost</u>**

WFA/Basin based the LRR's locomotive fuel costs on BNSF's average cost per gallon of diesel fuel (including handling, taxes and hedge effect) of $1.141 per gallon as reported in the BNSF Annual 2004 Investors' Report for the fourth quarter of 2004.[7] WFA Basin Op. Narr. at III-D-7. This cost was applied across-the-board, regardless of fueling location or methodology (use of fuel racks at permanent locomotive fueling facilities or DTL service). BNSF developed separate delivered costs by location and fueling methodology. The 4Q04 delivered cost at Guernsey, which is the LRR's principal locomotive fueling point, equaled { } per gallon according to BNSF. <u>See</u> BNSF Reply Narr. at III.D-9.

(a) **<u>Guernsey</u>**

Most of the fuel consumed by the LRR's locomotives is dispensed at Guernsey, WY, using permanent fueling facilities. Guernsey is a large real-world BNSF locomotive fueling point. Although BNSF produced information in discovery concerning its cost of fuel delivered to Guernsey by quarter in 2004, WFA/Basin's locomotive and fuel experts (Messrs. George Donkin and K.M. Claytor) testified on Opening that BNSF's actual, historical data overstated what a new entrant that is a replacement for BNSF could achieve in terms of delivered fuel cost at Guernsey. In addition, BNSF's location-specific

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[7] <u>See</u> WFA/Basin Op. Workpapers Vol. 7, pp. 4652-4654.

delivered-cost data do not reflect the effects of BNSF's fuel hedging program, which reduced its actual 2004 fuel costs by 20 percent.

With respect to the delivered cost of fuel, BNSF states that most of the fuel consumed at Guernsey comes from Midwestern and Gulf Coast refineries and is transported to Guernsey by a combination of pipeline and tank car, while a relatively small percentage ({ } in 2004) is delivered direct by pipeline from { }. WFA/Basin's experts testified on Opening that as a new entrant with a very high initial demand for diesel fuel, the LRR would be an attractive customer for refineries in Wyoming and Montana and should be able to attract the necessary investment in additional pipeline infrastructure to enable 100% of its diesel fuel requirements to be supplied by pipeline from nearby refineries at a delivered cost no greater than BNSF's system-average cost as reported in BNSF's 4Q04 Report to Investors. See WFA/Basin Op. Narr. at III-D-7 to 12.

BNSF asserts that because the LRR is a replacement for BNSF, it would not add any new (or incremental) consumption to the diesel fuel market in the area, and therefore could not achieve delivered fuel costs at Guernsey below those actually achieved by the real-world BNSF (which are substantially higher than system-average costs). BNSF Reply Narr. at III.D-7. However, BNSF's argument is inconsistent with Board precedent to the effect that a SARR starts operations with a new demand for labor and materials. See TMPA at 84 (rejecting the complainant's argument that a SARR could draw upon a pool of experienced BNSF employees that would be displaced by the SARR's replacement of a portion of the BNSF because it would be "inappropriate and inconsistent with the purpose of the SAC test to assume the existence of the defendant railroad so as to relieve a SARR of a cost which the defendant carrier incurred"). The same reasoning that the Board applied to a SARR's demand for start-up employees applies equally to a SARR's start-up demand for diesel fuel.

BNSF assumes that because it is unable to attract expanded pipeline capacity at Guernsey and reduced delivered fuel prices at that location, the LRR also would be unable to do so. BNSF Reply Narr. at III.D-7-8. However, WFA Basin's Witness Donkin notes that, as a theoretical new entrant with a huge initial fuel demand, the LRR occupies a substantially different market position than BNSF.[8]

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[8] On Opening, WFA/Basin mistakenly indicated that the LRR's initial annual diesel fuel demand was over 50 million gallons annually. BNSF points out that this is the peak-year demand, not the base year demand, and that base-year demand is lower (the exact amount depends on the fuel consumption rates assumed). WFA/Basin note, however, that BNSF's calculation of Guernsey fuel demand is internally inconsistent. BNSF's analysis assesses the fuel needs of trains arriving at Guernsey based on fuel consumption since the trains' last fuel stop, which includes fuel consumption on the LRR as well as on the residual BNSF. However, rather than using fuel consumption rates from its own special study (BNSF Reply electronic workpaper "III-D-1 Fuel Burn Analyzer v2.0.xls"), BNSF assumed URCS system-average fuel consumption rates for its Guernsey fuel consumption analysis. See BNSF Reply electronic workpaper "Modified LRR Fuel Usage at Guernsey.xls." Thus, BNSF uses lower consumption rates to argue that the LRR would not generate any incremental demand for diesel fuel at Guernsey, but higher consumption rates to calculate LRR operating expenses. If BNSF had used its own special study consumption rates and kept all of its other assumptions constant, it would have shown the LRR to consume five million gallons more than BNSF itself did at
(continued...)

Even if the Board were to conclude that the LRR would be unlikely to obtain diesel fuel delivered to Guernsey at a price lower than the average price paid by BNSF in 4Q04, the location-specific delivered price paid by BNSF overstates its actual fuel costs because that price excludes the effects of BNSF's fuel hedging program, which reduced BNSF's overall 2004 fuel costs by 20 percent and its 4Q04 fuel costs by 24 percent. BNSF's 2004 system average costs do include the effects of its hedging program, and therefore are more likely to reflect actual costs than BNSF's Guernsey delivered fuel price data.

The location-specific fuel price data provided by BNSF do not reflect BNSF's hedging program because BNSF's cost data for diesel fuel delivered to specific locations were not adjusted downward to incorporate the benefits of hedging fuel prices. As a least-cost, most-efficient new entrant, the LRR would hedge its fuel purchases as well and there is no reason to believe it could not achieve the same result as BNSF.

BNSF's location-specific fuel price calculations are shown in Reply electronic workpaper "III-D-1 LRR Fuel Price.xls." The source of this information is BNSF's Fuel Management Group database, which BNSF provided in discovery. <u>See</u> BNSF Reply Narr. at III.D-9 n.17. According to BNSF, that database "tracks the cost and volume of fuel dispensed by location," records payments to third party vendors and

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[8](...continued)
Guernsey in the base year. <u>See</u> WFA/Basin Rebuttal electronic workpaper file "Modifed LRR Fuel Usage at Guernsey BNSF Rates.xls" and Rebuttal Exhibit III-D-1.

transportation providers, and includes a cost component for BNSF to transport fuel in tank cars. Id. The database contains no indication that it reflects the effects of fuel hedging, and in response to a WFA/Basin request for additional supporting workpapers, BNSF simply quoted from the cited footnote in its Reply Narrative.[9] Generally, hedge benefits/losses are accounted for separately from the actual purchase of fuel, and would appear in separate journal and general ledger entries. BNSF has provided no information to indicate that it accounts for the effects of hedging in a different manner.

BNSF's system-wide fuel costs, on the other hand, do reflect the cost savings resulting form BNSF's hedging program. The fuel cost included in Schedule 750 of BNSF's R-1 reflects fuel cost on a basis net of hedging credits.

The BNSF Annual 2004 Investors' Report states that the average cost for fuel in 2004 equaled \$0.993 per gallon. See WFA Op. workpapers Vol. 1, pp. 00710-711. The \$0.993 cost per gallon matches the fuel cost per gallon calculated from data reported in Schedule 750 in the 2004 Annual Report R-1. Note (b) to the fuel cost per gallon item in the 2004 Investors' Report states that it "[i]ncludes handling, taxes and hedge effect." Therefore, the system average fuel cost per gallon from the Annual Report R-1 includes credits resulting from BNSF's hedging practice.

The impact of BNSF's hedging program is reflected in BNSF's 2004 Annual Report Form 10-K. BNSF's 2004 10-K shows that in 2004 BNSF's hedging

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[9] See WFA/Basin Rebuttal electronic workpaper "BNSF Fuel Response.pdf."

program saved the company $337 million in fuel costs.[10] BNSF's 2004 R-1, Schedule 750 shows that system fuel cost equaled $1,335 million.[11] These data show that the hedging program reduced BNSF's 2004 fuel cost by 20%, i.e. 337/(1,335+337).

The effect of BNSF's hedging of its fuel purchases is demonstrated by comparing the system average fourth quarter 2004 fuel cost in the BNSF Annual 2004 Investor's Report of $1.141 per gallon with BNSF's delivered cost per gallon at Guernsey of { } per gallon. If the impact of hedging is eliminated from the system average fuel expense in 4Q04, the system cost is $1.4263 per gallon ($1.141/80% = $1.4263) which is { } to BNSF's calculation of the Guernsey 4Q04 average delivered price of { }.[12] For this reason, the Board should reject BNSF's purported specific calculation of the delivered cost of fuel at Guernsey and accept WFA/Basin's 4Q04 system average cost, which reflects the effects of BNSF's hedging program.

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[10] See WFA/Basin Reply electronic workpaper "2004 Annual Report - Fuel.pdf," which was included with WFA/Basin's reply evidence filed on July 20, 2005.

[11] See WFA/Basin Op. Electronic Workpaper "BNSF04 Index Open.124," Column M, Line 7.

[12] The impact of BNSF's fuel hedging program was even more pronounced in the fourth quarter of 2004, when diesel fuel prices spiked to $1.48 per gallon nationwide compared to an average price of $1.27 per gallon over the entire year 2004. In the fourth quarter, BNSF received a $126 million fuel hedge benefit on $397 million spent on fuel. The $126 million fuel hedge benefit is calculated by subtracting BNSF's fuel hedge benefit for the first three quarters of 2004 of $212 million, as reported in BNSF's 3Q04 Form 10-Q, from its 2004 annual fuel hedge benefit of $338 million as reported in its 2004 Form 10-K. See WFA/Basin Rebuttal Workpapers, pp. 00409-426 and Rebuttal electronic workpaper "4Q04 Hedging Benefit Percent.xls." This data shows that BNSF's hedging program reduced is fuel cost by 24%, i.e. 126/(397+126), in 4Q04.

(b) LRR Fueling by DTL

The trains that move to LRS do not operate via Guernsey. These LRR trains are fueled at LRS by the same contractor (QRS) that BNSF uses. The contractor obtains fuel from BNSF at Guernsey and transports it to LRS for dispensing into locomotives, and charges BNSF for this "Moba" DTL fueling service. BNSF produced information in discovery concerning its actual payments to the contractor for this DTL fueling service, and asserts that the LRR would incur the same DTL cost that BNSF incurs, over and above the cost of the fuel itself. See BNSF Reply Narr. at III.D-11.

WFA/Basin disagree that a separate DTL charge should be added to the cost of fuel because that cost already includes handling charges. As described above, the BNSF 2004 Investors' Report used by WFA/Basin to develop the 4Q04 system-average fuel cost states that the cost "[i]ncludes handling, taxes and hedge effect." "Handling" includes DTL service, so the system-average number used by WFA/Basin already reflects DTL costs and adding BNSF's proposed separate DTL cost to the system-average cost double counts for this item.

The Board rejected the inclusion of a similar separate handling item in the Eastern rate cases. In both Duke/NS and Duke/CSXT, the complainant used the defendant's system-average fuel cost per gallon and the carriers used a higher figure, claiming that reliance on R-1 figures was improper (in the Board's words) "because that cost does not include the labor cost associated with Duke's proposed use of contractors to fuel locomotives." The Board rejected the defendants' argument in both cases because "[t]he R-1 expenses include an embedded labor component in the storage and dispensing costs." Duke/NS I at 69; Duke CSXT I at 55. BNSF has provided no evidence indicating that DTL charges such as those BNSF paid to QRS for fueling LRS trains are excluded from its system average fuel cost per gallon. Such evidence is essential given that BNSF's position is contradicted by the footnote in the BNSF 2004 Investors report indicating that the system average fuel cost already includes handling costs.

(c) Fueling by the Residual BNSF

For trains that are fueled on the residual BNSF, WFA/Basin again assumed the LRR would pay BNSF's system-wide average fuel cost for the proportion of the trains' total LUMs that occur on the LRR. BNSF again asserts that the LRR should pay for fuel using BNSF's actual delivered costs for the fueling locations involved, including a DTL additive in the two instances where LRS trains are fueled by the residual BNSF using DTL service.[13] However, the same problems exists with using specific delivered fuel costs (and DTL charges, where applicable) at these other locations that exist with using the delivered fuel cost at Guernsey and adding a DTL charge for fueling the LRS trains, as described above: the location-specific delivered fuel costs do not reflect the

[13] These include trains moving to the Dave Johnston plant which are interchanged with BNSF at Orin Jct. and trains moving to the Platte River/Rawhide plant which are interchanged with BNSF at Moba Jct.

cost-lowering effects of BNSF's fuel hedging program, and the DTL charges are included in the system-average costs used by WFA/Basin.

ii. <u>Fuel Consumption</u>

On Opening, WFA/Basin developed an average fuel consumption rate for the LRR by applying BNSF's 2004 URCS system average fuel consumption rates per gross ton-mile and diesel unit-mile to the LRR trains that moved during the peak week. This yielded total gallons of fuel consumed by LRR trains, which was then converted to 3.27 gallons per diesel unit-mile based on BNSF's 2004 R-1. <u>See</u> WFA/Basin Op. Narr. at III.D-12 and Op. electronic workpaper "LRR Fuel Consumption.xls."

BNSF asserts that fuel consumption by unit coal trains operating over the LRR route "consume fuel at a rate that substantially exceeds BNSF's system average fuel consumption rate" (BNSF Reply Narr. at III.D-13), and developed fuel consumption by PRB coal trains that originate at LRR-served mines and travel to/from Guernsey and Donkey Creek (the principal LRR destinations) based on a special study using event recorder data obtained using a new procedure.[14] The results of the special study were fuel consumption rates for movements from origin mines to Guernsey ranging from { }

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[14] As BNSF notes, the Board accepted special-study fuel consumption data based on event recorder data for PRB coal trains in the <u>TMPA</u> and <u>Xcel</u> cases. However, the study procedures used in those cases were much different than the new study procedure used in this case, and in those cases (unlike this case) BNSF made available to the complainant and the Board both the computer program used to process the raw event recorder data and the raw event recorder data itself.

gallons per LUM to {   } gallons per LUM, depending on the mine origin. BNSF Reply Narr. at III.D-16. These consumption rates are considerably higher than the rate of 3.27 gallons per LUM used by WFA/Basin and developed from system average data.

BNSF's special fuel consumption study for BNSF coal trains moving over the LRR route, as described in its reply evidence, was based on the same study procedures as the special study of fuel consumption by the LRR trains which BNSF presented in its opening evidence, and suffers from the same fatal flaws. Those flaws were described in Reply Exhibit II-A-1 submitted with WFA/Basin's reply evidence filed on July 20, 2005. Additional problems are described in WFA/Basin Rebuttal Exhibit II-A-2. The discussion in these exhibits is incorporated herein by reference and will not be repeated, except to note that the same methodological problems, lack of source data, and lack of the computer tools needed to evaluate BNSF's fuel study results for the LRS trains apply equally to BNSF's fuel study results for other movements included in the LRR's traffic group.

Because BNSF has not established that the fuel consumption data it developed is either accurate or representative of the fuel consumption by the LRR's coal trains, the Board should reject BNSF's fuel consumption evidence and accept WFA/Basin's use of the BNSF 2004 system average consumption rate of 3.27 gallons per LUM as the best evidence of record.

2. **Railcars**

a. **Leasing**

BNSF has accepted WFA/Basin's railcar lease unit costs for the various types of coal cars used by the LRR's customers. See BNSF Reply Narr. at III.D-17. However, BNSF applies the unit costs to different numbers of cars. The LRR's car requirements, including the appropriate spare margin, are discussed in Part III-C-1-c-iii above. The Rebuttal revisions to the number of cars required results in an increase in base-year lease costs from $2.67 million (WFA/Basin's Opening railcar lease expense) to $3.47 million. This is still substantially less than BNSF's railcar lease expense of $6.14 million.

b. **Maintenance**

WFA/Basin did not include a separate maintenance cost for railcars because maintenance costs are included in the full service car leases used to acquire the cars. BNSF asserts that WFA/Basin should have added car repair costs that are the user's (lessee's) responsibility under the lease contract used by WFA/Basin. BNSF developed an URCS-based user car repair cost of $0.0035 per mile which it applied to the LRR's total car-miles for the cars which it supplies. See BNSF Reply Narr. at III.D-17 to 18.

WFA/Basin accept BNSF's use of a user car repair cost of $0.0035 per mile. However, they apply this expense only to car miles for shipper-provided railcars. The "user car" repair expense historically has been applied only to foreign and shipper-provided cars, not to system cars. For example, in Xcel I at 144, which BNSF cites as support for inclusion of the user car repair expense, this expense was added to the variable cost of providing service to Xcel, not the stand-alone cost. Moreover, the parties agreed in Xcel that this charge applied only to shipper-provided cars.

c. Foreign Cars and Private Car Allowances

BNSF has accepted WFA/Basin's treatment of foreign cars and private car allowances. See WFA/Basin Op. Narrative at III-D-16, BNSF Reply Narr. at III.D-18, and Part III-C-1-c-iii of this Rebuttal Narrative. The LRR also pays no mileage allowances with respect to coal movements in private cars.

3. Personnel

a. Operating

i. Staffing Requirements

BNSF has accepted WFA/Basin's proposed Operating staffing for the LRR except in two respects. First, BNSF wants to increase the number of T&E personnel by 37 employees. Second, BNSF proposes to increase the number of non-train crew Operating personnel by eight employees (all for two clerk/crew hauler positions). See BNSF Reply Narr. at III.D-19, Table III.D.3-1. The difference between the parties with respect to Operating employees is the smallest for any SAC rate case that has come before the Board. For example, in Xcel there was a 40-employee difference between the parties' non-train crew Operating staffing for the SARR. See Xcel I at 63. Here, the difference is only eight employees – and the difference relates entirely to a single position.

WFA/Basin note BNSF has moved two positions that WFA/Basin included as General and Administrative ("G&A") positions to the non-train crew Operating personnel category. These are the Director of Marketing & Customer Service and the Customer Service Manager positions. In accordance with Board precedent, WFA/Basin continue to include these positions in the G&A staff rather than treating them as Operating employees.[15] However, their classification does not affect the LRR's total employee count (or annual operating expenses) since both parties agree on the number of employees required to staff these positions. See BNSF's Table III.D.3-1.

(a) Operating Personnel (Except Train Crews)

The parties are in complete agreement with respect to the LRR's non-train crew Operating (and customer service) personnel requirements except for a single position. WFA/Basin's operating plan does not call for any crew haulers. BNSF, however, proposes to add two 24/7 clerk/crew hauler positions, primarily to transport train crews within the Guernsey and Donkey Creek yards. A total of eight employees would be required to man these two positions around the clock. BNSF Reply Narr. at III.D-19. Recognizing that transporting train crews is unlikely to be a full-time job,

[15] See, e.g., TMPA at 96 (customer service and marketing personnel treated as G&A employees); Xcel I at 65 (same).

BNSF suggests that these employees also would be "available" to perform various minor administrative duties at these yards. Id. at III.D-19 to 20.

WFA/Basin's operating experts, Messrs. Reistrup and Smith, explained why no crew hauler positions are needed in WFA/Basin's opening evidence. See WFA/Basin Op. at III-D-22 to 23. BNSF did not address this evidence at all on Reply – it merely declared that its Witness Mueller added two crew hauler positions to transport crews at two yard/crew-change locations. Nor did BNSF address the Board's holding in Xcel I that crew hauler positions are not needed at a PRB coal SARR's yards. Id. at 64.

In short, WFA/Basin's position that the LRR does not need crew haulers is supported by specific evidence and by Board precedent. BNSF has failed to present anything other than unsupported opinion evidence to establish why crew haulers are needed.

(b) Train Crews

BNSF accepted the LRR's crew districts and crew assignments (including road, helper and switch crew sizes) reflected in WFA/Basin's Operating Plan. See BNSF Reply Narr. at III.D-20 and III.D-22. It also accepted WFA/Basin's assumption that each crew person would work 270 shifts per year. Id. at III.D-20. However, BNSF asserts that the LRR requires 208 T&E crew members in the base year, an increase of 37 employees over the 171 T&E employees posited by WFA/Basin on Opening.

The difference is caused by three factors: (i) differences in train transit times produced by the parties' RTC Model simulations of the LRR's peak-period operations, which affects total road crew personnel and the re-crew percentage (which also affects taxi and overnight expenses); (ii) differences in the calculation of switch crew personnel; and (iii) WFA/Basin's failure to provide crews for the LRR's work trains.

Road crew personnel. On Opening, WFA/Basin provided for 171 road crew personnel in the peak year and 158 in the base year. See WFA/Basin Op. electronic workpaper "LRR Operating Statistics.xls," tab "Peak to Base Summary." WFA/Basin's road crew requirements calculation was based on the total number of crew starts required in the peak year, from which they determined the personnel required to run those trains assuming that each crew member can work 270 days per year. See WFA/Basin Op. electronic workpaper "LRR Annual Statistics.xls," tab "Crew-Taxi." WFA/Basin also provided for recrewing for those occasions when a crew might exceed the 12-hour maximum service time provided by law based on the transit times from the RTC simulation. Messrs. Reistrup and Smith conservatively used 10.5 hours as the cut-off for recrewing. On Opening, only 2.2 percent of all crew starts required recrewing, or a total of 161 recrews over the peak year. Id. at cell T11.

On Reply, BNSF accepted the crew-count methodology that WFA/Basin used on Opening. See BNSF Reply Narr. at III.D-20. However, BNSF upped the recrewing percentages based on the results of its Reply RTC modeling, in which its average train speeds were generally slower than those developed by WFA/Basin. Id. at III.D-21. In addition, BNSF provided for 44 percent more recrewing for those crews working in turn service from Donkey Creek or Campbell to the mines and back to Donkey Creek or Campbell. Id. at III.D-21 to 22. Thus, BNSF calculated a total peak year requirement of 201 crew members, which was reduced to 187 for the base year. Id. at III.D-22.

On Rebuttal, WFA/Basin have again determined that the LRR needs 171 crew members in its peak year and 158 in the base year. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls," tab "Peak to Base Summary." Similar to their Opening recrew percentage, WFA/Basin's Rebuttal recrew percentage is only 1.98 percent. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Annual Statistics.xls," tab "Crew-Taxi." There are, however, a few changes. The total traffic moving to the Columbia power plant dropped slightly, which reduced crew starts somewhat. Id. at tab "SARR Traffic_2024." However this slight reduction in crew starts was offset by the addition of 50 crew starts for work train service. Thus, WFA/Basin's total crew starts on Rebuttal are 23,054 versus 23,036 on Opening. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Annual Statistics.xls," tab "Crew-Taxi" and WFA/Basin Op. electronic workpaper "LRR Annual Statistics.xls," tab "Crew-Taxi." For the reasons explained below, WFA/Basin have not added any more recrews for the mine turn service from Campbell/Donkey Creek.

BNSF's rationale for the additional turn crews from Donkey Creek or Campbell is that a turn could not be completed 44 percent of the time because (1) a loaded train would not be available soon enough at the drop off mine or a nearby mine, such that the crew could return to the Donkey Creek or Campbell within 11 hours (BNSF used 11 hours rather than WFA/Basin's 10.5 hours as its recrew cut-off time); or (2) the length of time spent moving in the empty direction would not permit a return trip. See BNSF Reply electronic workpaper "III D 3 train matching.xls." As shown below, BNSF's analysis is flawed. Moreover, WFA/Basin's Rebuttal RTC transit times show that in most cases a turn can be easily completed, or if need be a crew can be rested at the mine and then returned to service without recrewing.

BNSF split the PRB mines into three geographical sections. The northern section includes mines located on the Campbell Subdivision. The central section mines include Belle Ayr, Caballo, Caballo Rojo, Coal Creek, and Cordero. The southern section mines include Antelope, Black Thunder, Jacobs Ranch, North Antelope/Rochelle, and North Rochelle. See BNSF Reply electronic work paper "III D 3 train matching.xls," tab "Summary."

As for the northern and central mines, WFA/Basin's average RTC round trip cycle times from Donkey Creek or Campbell to any of the northern or central mines and back to Donkey Creek or Campbell is less than 10.5 hours. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls," tab "Interchange Trains," column "E." Thus, a crew could always perform its turn service with the very train it brought to the mine. Therefore, no recrewing is required.

For the southern mines, WFA/Basin's operating experts have examined BNSF Reply electronic workpaper "III D 3 train matching.xls," and found it fatally flawed. In particular, BNSF's attempt to "match" crews is almost incomprehensible, and the task of unraveling BNSF's approach is further encumbered by the trains that it included in the matching process. For example, BNSF included trains that load at mines from which a northerly movement is not possible (Antelope and North Rochelle), and it included trains that are supposed to be crewed by straightaway crews, not turn crews – namely trains moving to Guernsey, Moba Jct. or Orin Jct. See, e.g., BNSF Reply electronic workpaper "III D 3 train matching.xls," tab "Matched-South," cells P1, P3 and P4. Trying to match turn crews with these loads is, therefore, inappropriate. In addition, BNSF's matching is hindered by slow cycle times that were not experienced in WFA/Basin's Rebuttal RTC simulation. See, e.g., Id. at cells L8 and L9. Simply put, BNSF's matching is unusable.

On Rebuttal, WFA/Basin's average cycle times from Donkey Creek or Campbell to the southern mines and back to Donkey Creek or Campbell range from 11 hours and nine minutes to 12 hours and 36 minutes. Thus, in most cases a turn cannot be completed by simply having the crew wait with the train. However, WFA/Basin's experts note that more than 20 empty trains and 20 loaded trains move to and from Donkey Creek and Campbell during the same two-day period that BNSF tried to match { }, such that the crews can reasonably expect to pick up another train at the same mine or a nearby mine and return. See WFA/Basin Rebuttal electronic workpaper "RTC Southern Mine Train List.xls."

WFA/Basin also note that a return trip is feasible because the average transit times (i.e., excluding time at the mines) is less than 10.5 hours to and from any southern mine. See WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Operating Statistics.xls," tab "Interchange Trains," column "U." Furthermore, peak-week cycle times would tend to be higher than those at other times of the year. Consequently, a turn would be possible with the same train most of the year.

Even if another train is not available for a turn crew, the crew can always be rested for at least four hours and returned to service with the same train it left at the mine. In particular, Messrs. Reistrup and Smith note that under the Hours of Service law a crew can take a respite from service (at least fours in duration) and can then return to service provided the service time before and after the respite does not exceed 12 hours. See 49 U.S.C. § 21103(b)(5), (6).[16] Indeed, according to Mr. Smith, a former locomotive engineer, this is a common practice and there is no reason why the LRR could not use the respite on the rare occasions when a turn could not be made immediately. Since the

[16] A simple rest area at the mines (presumably an office or recreation area) or at a motel would provide the rest terminal needed under the cited hours of service provisions

transit times never exceed 12 hours, and a respite would allow the crew to return after loading has been completed, WFA/Basin have not added any recrews to the movements from the southern mines.

Switch crew personnel. As noted in Part III-C-1-c-ii-(c) above, BNSF accepted the use of one-person switch crews for the LRR's two switching assignments at Guernsey Yard. (See also BNSF Reply Narr. at III.D-22.) However, BNSF's operating-expense spreadsheet erroneously assumes two-person switch crews, which apparently is why BNSF states that 11 switch crew employees are required. Id. In fact, six employees are required to man two one-person crews on a 24/7 basis.[17] Thus, BNSF has overstated the LRR's switch crew requirement by a total of five employees.

Work-train crew personnel. WFA/Basin did not provide for any specific employees to man the LRR's work trains. BNSF provided for two crew persons to operate work trains. BNSF Reply Narr. at III.D-23.

On Opening, WFA/Basin's experts provided for two small sets of LRR-owned work equipment, and two SD40-2 locomotives to be used in work-train service (both for track maintenance provided by the LRR's in-house MOW forces and for contracted program maintenance, i.e., rail and ballast trains). See WFA/Basin Op. Narr. at III-C-20 and III-D-125 to 126.

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[17] See WFA/Basin Rebuttal electronic workpaper "LRR Switch Crews Reb.xls."

BNSF has accepted the number of locomotives required for work trains (BNSF Reply Narr. at III.C-12), and thus the concept that the LRR would operate no more than two work trains at a time. The work trains would not operate every day; in fact, BNSF posits a total of 236 work-train days per year, or an average of 118 days for each of the two work-train locomotives (of which 58 days, or 29 days per locomotive, would be spent on OE activities as opposed to annual program work). WFA/Basin Witnesses Reistrup and Smith note that, in all likelihood, the LRR would be able to man the work trains with the T&E employees provided for road and helper service – particularly since the work trains would not operate during the peak traffic period that was studied using the RTC Model (and that was used to determine the LRR's T&E personnel requirements). WFA/Basin's MOW experts testify in Part III-D-4-f-iii-(d) below that only 50 work-train starts are required for the operating-expense portion of annual maintenance. To account for train crews for these 50 train crew starts, WFA/Basin have added these starts to the annual crew-start requirement when calculating T&E personnel requirements.

BNSF incorrectly added two T&E crew personnel, covering 236 work-train crew starts, to its operating-expense calculations even though its own MOW witness characterized 178 of these starts as being for annual program maintenance which means they should not be included in operating expense. Id.[18]

(c) Mine Loading, Taxi and Overnight Expenses

BNSF has accepted WFA/Basin's use of contractors to move trains through the mine loading facilities, as well as the $2 million cost for this activity in 2004. See BNSF Reply Narr. at III.D-23. BNSF has also accepted WFA/Basin's unit costs for overnight crew stays and their approach to developing the number of overnights; the cost difference is related to the parties' traffic volume and train counts. Id. WFA/Basin's re-calculation of overnight stays and total costs, which is derived from the Rebuttal RTC simulation results, is shown in WFA/Basin Rebuttal electronic workpaper "LRR Rebuttal Annual Statistics.xls," tab "Crew-Taxi."

BNSF disagrees with WFA/Basin's calculation of taxi costs for T&E personnel in several respects. First, BNSF asserts that although WFA/Basin assumed round-trip taxi service, they erroneously used one-way mileages in calculating average taxi miles. Second, BNSF asserts that WFA/Basin failed to apply the ${ } minimum trip cost specified in BNSF's taxi contract for the period July 1, 2004 to June 30, 2005. Third, BNSF disagrees with WFA/Basin's approach to developing the number of taxi

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[18] It should also be noted that on Rebuttal, WFA/Basin have accepted BNSF's parameters for calculating work train locomotive unit miles (miles traveled by shift and number of locomotives per train). However, WFA/Basin calculated these statistics only for the 50 work-train days to be included in annual operating expenses.

trips required for crew operations at the mines and for helper crews. See BNSF Reply Narr. at III.D-23 to 24.

The effective difference between the taxi costs used by the parties is $277,190. On Opening, WFA/Basin calculated the average cost per trip to equal { }, based on a one-way taxi cost of { } per mile. BNSF assertedly based its calculation on the terms of its contract with Powder River Transportation, a taxi service provider, and determined the cost per trip to be { }. In fact, BNSF adopted only those portions of the contract which are beneficial to increasing the taxi costs and ignores those components which minimize the costs. WFA/Basin accept BNSF's use of the agreement between Powder River Transportation and BNSF as the basis of calculating taxi costs, but correct BNSF's misapplication of this agreement.

BNSF's taxi agreement with Powder River Transportation contains two components: {

}[19]

[19] In short, these taxis provide an analogous service to that provided by the crew haulers that BNSF proposes (improperly) for the LRR at Guernsey and Donkey Creek Yards. BNSF double-counts transportation costs by requiring the LRR both to hire crew haulers and pay a taxi operator to carry train crews short distances from Guernsey or Donkey Creek.

The second component of BNSF's taxi agreement is for { }. This component provides that BNSF will pay { }. The agreement also provides that BNSF { }.

For purposes of its taxi analysis, BNSF ignored the { } of its taxi agreement altogether and relied exclusively on the { } of the taxi contract. Moreover, BNSF also ignored the { } provided for in the contract and instead accepted WFA/Basin's { } per one-way mile charge and applied it to round trip miles.

BNSF states that it accepted WFA/Basin's { } per mile charge because it is less than what BNSF actually pays under the terms of its contract, which is an average of { } per mile. See BNSF Reply Narr. at III.D-23. However, review of BNSF's supporting workpaper ("III D 3 bnsf gillette taxi.xls") shows that the difference between the contractual { } mileage charge and BNSF's average payment of { } per mile is the inclusion of the { } in the calculation of the { } per mile charge. The average wait time, according to BNSF's database, is { }

[20] A review of BNSF Reply electronic workpaper "III D 3 bnsf gillette taxi.xls" indicates that, under this portion of the contract, { }.

minutes. It is uncertain from BNSF's analysis whether these wait times include the { } under the contract, but if they do not, the average wait period is even longer { } minutes. Given these extended waits, it is likely that some of this time results from taxis waiting for crews to carry on a return trip. BNSF also improperly assumes that all taxis return empty, i.e., without a crew. Therefore, there is no reason to believe that the taxi service would { }.

On Rebuttal, WFA/Basin accept the use of BNSF's taxi contract, but apply all components of the agreement rather than selecting only portions of the contract. WFA/Basin use the { }. When applying the { } portion of the agreement, WFA/Basin use the { }. Finally, WFA/Basin assume that no crew is transported on a return trip and therefore do not include { }. WFA/Basin's total Rebuttal taxi cost equals $1,008,510 in the base year. See WFA/Basin Rebuttal electronic workpaper "LRR Taxi Distance Reb.xls."

ii. Compensation

As shown in the table on page III.D-31 of BNSF's Reply Narrative, the parties are in agreement with respect to compensation for all of the LRR's Operating personnel except for train crews.[21] The difference between the parties' compensation for T&E employees in the base year is nearly ${ } million. Most of the difference in compensation for T&E employees relates to the salary each party proposes to pay to each of the LRR's T&E employees. WFA/Basin's annual salary figure for these employees is $59,517. BNSF's proposed salary is ${ }, which is { } than WFA/Basin's proposed salary. Id.

WFA/Basin explained the basis for their proposed compensation for T&E employees (including compensation for some of the constructive allowances BNSF pays its T&E employees) in detail at pp. III-D-27 to 30 of their Opening Narrative. BNSF proposes a substantially higher salary for two reasons. First, BNSF asserts that WFA/Basin improperly excluded some constructive allowances that BNSF pays its train crew personnel. Second BNSF asserts that the LRR would have to pay more than BNSF's average salary for T&E employees because it requires them to work more shifts per year than BNSF's average employee works. See BNSF Reply Narr. at III.D-25 to 30.

(a) Constructive Allowances

With respect to constructive allowances, BNSF relies heavily on Xcel I, in which the Board held – on the basis of the evidence before it in that proceeding – that none of the constructive allowances paid by BNSF should be excluded because "[their]

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[21] As noted earlier, WFA/Basin's experts do not agree that the LRR needs clerk/crew haulers so they did not develop compensation for this position. BNSF's proposed compensation for this (unneeded) position appears reasonable.

payment is part of the prevailing market wage that the [SARR] would have to pay to attract and retain its train crews." Id. at 68. In their opening evidence WFA/Basin showed, on the basis of information that was not in the Xcel record, why a non-union SARR would not have to pay all of the constructive allowances that BNSF pays its T&E employees. See WFA/Basin Op. Narr. at III-D-28 to 30. BNSF's criticisms of this evidence relate primarily to its second argument, namely, that the workload of the T&E employees of the other railroads cited by WFA/Basin is substantially less than the workload of the LRR's T&E employees, as measured by the number of crew starts per employee per year.

More specifically, BNSF claims that (1) WFA/Basin have not shown that WCS's constructive allowances have any relationship to the LRR; (2) the article cited by WFA/Basin showing that regional carriers pay 15 to 20 percent lower compensation than do Class I carriers does not apply to the LRR's train crews; and (3) the wages paid to Iowa Chicago & Eastern Railway ("ICE") train crew employees, when indexed to 4Q04 levels, would be higher than the wages proposed by WFA/Basin for the LRR's T&E employees.

None of BNSF's claims is correct. First, WFA/Basin conclusively demonstrated that a large regional railroad (WCS) does not pay all the legacy constructive allowances to its train crews that the Class I carriers pay. See WFA/Basin Op. Narr. at III-D-28 to 29. In large measure, this is because the regional carriers do not have to pay their employees the same concessions that Class I carriers pay to their employees for their past actions such as mergers. These allowances did not apply to the WCS employees and would not apply to the LRR employees.

Second, WFA/Basin did not exaggerate the significance of the article referred to by BNSF ("A Different Way to Run a Railroad: Regional Versus National Carriers"). This article states that train and engine service personnel with regional carriers tend to have lower compensation levels than those that work for Class I carriers, and estimates this compensation to be 15 to 20 percent less than that paid to Class I carrier's T&E personnel. See WFA/Basin Op. Workpapers Vol. 8, p. 04775.

Finally, BNSF claims that the ICE T&E crews working 270 shift per year would be paid the highest wage per day of all ICE employees. Based on this assumption, BNSF calculates that these employees would earn $70,940 per year at the 4Q04 level which is more than the $59,517 WFA/Basin proposes to pay the LRR employees. BNSF's analysis is faulty for two reasons. First, the ICE wage rates quoted by WFA/Basin are daily wage rates that range from $107.58 to $161.36. When indexed to 4Q04, these rates range from $117.15 to $175.72 per day. BNSF assumes, without any support, that an employee who works 270 shift per year will also be paid the highest possible daily rate. BNSF's assumption is baseless. The highest daily rate would be paid to employees with the greatest seniority, not to those who work the most shifts. Those employees who work the most shifts will be compensated more than those who work average or below average shifts because they will be paid for more shifts. Were one to apply the average daily rate of $146.44 (at the 4Q04 wage and price levels) times 270 shifts per year, the average employee who works 270 shifts per year is paid $59,110 annually (including the 49.5 constructive allowance and overtime ratio), which is almost identical to the $59,517 WFA/Basin proposes to pay the LRR's T&E employees.

Second, even assuming that BNSF were correct that the LRR's T&E personnel should be paid the highest daily rate, by BNSF's own calculation this results in annual income of $70,940. While greater than the annual wage proposed by WFA/Basin, this is far less than the absurd annual wage of { } that BNSF proposes.

(b) "More Work for Less Pay"

BNSF asserts that WFA/Basin's proposed T&E employee compensation level is too low because the LRR's T&E employees are expected to work 270 shifts per year which is "far" more shifts than the average BNSF T&E employee works in a year.[22] BNSF developed an average compensation rate for the "hardest working" BNSF T&E employees, i.e., those engineers who worked {

}. This resulted in the

[22] See BNSF Reply Narr. at III.D-27 to 29. WFA/Basin's proposed compensation level was based on the compensation shown in BNSF's Wage Form B data for all T&E employees.

overall average wage of { }, including all constructive allowances, which is what BNSF asserts the LRR would have to pay its T&E employees. Id. at III.D-27 to 30.

BNSF's proposed T&E crew wage of { } cannot be used for two reasons. First, it is based on the wages paid only to {

} of the 9,232 T&E through freight engineers and conductors on BNSF's system. The wages for these { } employees are hardly representative of the wages that BNSF pays its T&E engineers and conductors.

More importantly, BNSF's calculation of annual wages for these { } employees is incorrect. Several of the wage payments to these employees are credit payments which BNSF includes in its calculation of wages as a positive number, when in fact, these credit payments must be subtracted from the total compensation paid to the employees rather than adding them.[23] By incorrectly adding the credit amounts, BNSF has overstated the wages actually paid to these employees.

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[23] It should be noted that BNSF correctly subtracted the credit amounts from total compensation when they were constructive allowance payments, yet if they were straight time or overtime payments BNSF added them to the total compensation. See WFA/Basin Rebuttal electronic workpaper "Sample TE Employees.xls."

In summary, BNSF's proposed T&E wage of {   } is outrageous. BNSF clearly is trying to jack up the LRR's crew-wage costs to the highest level possible, beyond what the evidence shows its own most highly-compensated train crews are paid. BNSF's proposed crew wages are an insult to common sense and to the SAC principle that a SARR should be a least-cost feasible railroad. They must be rejected.

iii. Materials, Supplies and Equipment

WFA/Basin described the materials, supplies and equipment for operating personnel (other than MOW personnel) at pp. III-D-32 to 33 of their Opening Narrative, and explained the development of the total annual cost of $1.05 million in their Opening electronic workpaper "LRR Materials and Supplies.xls." BNSF has accepted WFA/Basin's unit costs for materials, supplies and equipment, but proposes a travel-expense additive equal to 5% of non-train operating personnel salaries. BNSF Reply Narr. at III.D-32.

WFA/Basin discussed travel costs in connection with G&A expenses. See WFA/Basin Op. Narr. at III.D-70. Travel costs were assigned only to managerial employees at the Manager level and higher (except those Manager-level employees whose duties would not require them to travel). BNSF's proposal to assign 5% of the salaries of all non-train operating personnel is unjustified by any supporting evidence, and it is also absurd. Most of the Operating managers are assigned company vehicles for travel purposes. Other non-train operating employees, such as Equipment Inspectors, the

Crew Manager and Crew Callers, and Dispatchers would have no reason to travel on company business. It is therefore inappropriate to include a blanket additive to their salaries for travel expense.

BNSF also claims that WFA/Basin's cost for the performance of unloading and inspection service at LRS, which was included in the materials, supplies and equipment costs, reflected costs incurred only for the fourth quarter of 2004. BNSF Reply Narr. at III.D-32. BNSF's evidence is intentionally misleading and totally insignificant. WFA/Basin included and calculated a full year's operating expense for unloading and inspection service at LRS by applying the 4Q04 actual unit costs to a full year of operating statistics to yield an annual cost of $374,803. BNSF used annual unit costs (which were not available to LRS when they filed their opening evidence) for the annual statistics, producing a total expense of $379,288 – an increase of only $3,485 in base-year operating expense.

b. <u>Non-Operating</u>

The LRR's personnel have all been designated either as operating personnel or as general and administrative ("G&A") staff. Mechanical personnel are included as operating employees, and BNSF has accepted WFA/Basin's proposed mechanical staffing. <u>See</u> BNSF Reply Narr. at III.D-32. The G&A staff is discussed in the next section. The maintenance-of-way employees, who are operating personnel, are discussed separately in Part III-D-4 below.

c. General and Administrative

The parties differ by $11.87 million in their calculation of the LRR's base-year G&A expenses. As it has done in prior SAC rate cases involving PRB coal movements, BNSF has inflated the LRR's G&A personnel and expenses to patently excessive levels. WFA/Basin's position on G&A expenses, on the other hand, is consistent with the Board's precedents and in particular with the recent Xcel I decision. This is obvious from the following comparison of the parties' positions on G&A personnel and base-year G&A expenses in this case with the Board's G&A findings in Xcel I.

Rebuttal Table III-D-3
Comparison of Base-Year G&A Personnel and Costs

Item	WFA/Basin	BNSF	STB/Xcel I
G&A Personnel[1/]	50	78	51[2/]
Total G&A Expense	$10.01 million	$26.88 million	$10.4 million[2/]

[1/] Includes Director of Marketing & Customer Service and Customer Service Managers (total of 12 employees), which BNSF incorrectly categorized as Operating employees.

[2/] Xcel I at 58, 65.

The Xcel case involved a coal-only SARR that was very similar to the LRR. The Xcel SARR traversed the same route as the LRR between the PRB mines and

Guernsey – and extended well beyond Guernsey to Xcel's Pawnee power plant near Brush, CO.[24] The traffic groups of the two SARR's are very similar, consisting entirely of coal moving in unit trains. The Board's G&A findings in Xcel I thus provide an excellent benchmark for assessing the parties' positions on G&A expenses in this case.[25]

In Xcel BNSF also attempted to inflate the SARR's G&A expenses far beyond a reasonable level. BNSF proposed a G&A staff of 78 employees (including the employees that BNSF improperly classifies as Operating employees in this case), and total base-year G&A expenses of $15.1 million. The Board rejected BNSF's position, and determined that an appropriate G&A staffing level was 51 employees and that total base-year G&A expenses were $10.4 million. Xcel I at 58, 65.

BNSF's G&A evidence in this proceeding essentially ignores the Board's G&A findings in Xcel. Notwithstanding the similarities between the LRR and the Xcel SARR (and the fact that the LRR is 45% shorter than the Xcel SARR), BNSF has proposed a much larger staff here – 78 employees on a comparable basis – than the Board found to be necessary in Xcel I (51 employees). BNSF has also proposed total base-year

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[24] The Xcel SARR had 396 route miles, compared with 218 route miles for the LRR. Thus the LRR's route is about 45% shorter than the Xcel SARR's route.

[25] BNSF purports to benchmark the LRR's G&A staff and expenses with a "peer group" of real-world railroads. However, no real-world railroad is comparable to a SARR that handles a single commodity exclusively in unit-train service.

G&A expenses of $26.9 million – or more than two and a half times the $10.4 million accepted in Xcel I.[26]

BNSF has made no serious attempt to square its G&A proposal for the LRR with the Board's findings in Xcel I. Its entire basis for ignoring Xcel I is the following passage in footnote 61 on page III.D-35 of its Reply Narrative: "The WCC stand-alone railroad hypothesized in *Xcel* handled less traffic than LRR, carrying almost 50% less of the tonnage proposed for LRR." Given the similar and highly-repetitive nature of the unit-train coal traffic involved in both cases, this is hardly justification for BNSF's inflated G&A staffing and expense levels in this case compared with the levels the Board determined to be reasonable in Xcel I. See also WFA/Basin Op. Narr. at III-D-37.

WFA/Basin presented a detailed discussion of its G&A staffing and expenses in its opening evidence,[27] and its evidence is consistent with the Board's Xcel I findings. BNSF has presented nothing new that justifies the glaring inconsistency between BNSF's proposed LRR G&A staffing and expenses and the Board's Xcel I findings. In this regard, WFA/Basin note that almost all of BNSF's G&A evidence in this case is a rehash of the G&A evidence it presented in the AEP Texas case (Docket No.

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[26] The Xcel SARR's first year of operations was 2001; the LRR begins operations in the fourth quarter of 2004. Even employing the inappropriate index used by the Board (the RCAF-U), operating expenses increased by only 12.2 percent from 1Q01 to 4Q04. See WFA/Basin Rebuttal electronic workpaper "RCAFU_1Q01-4Q04.xls."

[27] See WFA/Basin Op. Narr. at III-D-33 to 71. This evidence spelled out the functions of each G&A department and employee in great detail.

41191 (Sub-No. 1)). BNSF used the same G&A witness (J. Reilly McCarren) in both cases, and made the same inappropriate "benchmark" comparisons with real-world railroads – in fact, most of Mr. McCarren's justifications for specific G&A staffing proposals were lifted verbatim from his testimony on behalf of BNSF in AEP Texas. AEP Texas responded in great detail to BNSF's G&A arguments in its rebuttal evidence. Most of that evidence is equally relevant here.[28]

In particular, AEP Texas demonstrated why BNSF's comparison of its SARR to a "peer group" of real-world railroads was invalid. Id. at III-D-64 to 68. That evidence is equally relevant in this proceeding because the same BNSF witness (Mr. McCarren) compares the LRR to the same "peer group" that he used in AEP Texas. Mr. McCarren's "peer group" comparisons lead down a false path because the LRR has no peer group to which it can be compared. Unlike any of the real-world railroads Mr. McCarren cites, the LRR is a single-commodity railroad that operates only unit coal trains in high-volume service in a small, rural service territory (only 218 route miles, all located in northeastern Wyoming). In fact, the LRR's only real-world peer is WRPI – a carrier Mr. McCarren does not mention.

Mr. McCarren repeatedly uses irrelevant measures for comparison, and argues on the basis of the comparisons that the LRR's G&A staffing is unrealistically

[28] See Complainant's Rebuttal Narrative (Public Version) in Docket No. 41191 (Sub-No. 1) filed July 27, 2004, at III-D-56 to 145.

low. However, even BNSF's proposed inflated G&A staffing is much lower than what BNSF declares to be realistic for allegedly comparable real-world railroads. For example, Figure III.D.3-6 on page III.D-45 of BNSF's Reply Narrative, as revised by BNSF's August 25, 2005 Errata filing, shows that BNSF's version of the LRR has $431,300 in revenue per employee in the 2004 base year. This is 50% more revenue per employee than the real-world railroad with the highest revenue per employee ($288,100 for BNSF).[29] BNSF's peer-group comparisons are a red herring, designed to distract the Board's attention from the fact that no existing railroad is configured like the LRR or handles similar traffic.

In summary, the Board has repeatedly rejected BNSF's argument that the total G&A expenses proposed by complainants should be comparable to those of real-world railroads. As the Board held in TMPA II at 22:

> BNSF's cost-comparison data does not show what it would cost to run a specialized, optimally efficient railroad. As explained in TMPA 2003 at 79-80, the structure of the GCRR would be substantially simpler than that of the BNSF or any other large-scale, general commodity rail carrier. Under these circumstances, the costs incurred by BNSF or other large

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[29]BNSF argues that the LRR's revenue per employee should be compared with the revenue per employee for smaller, "peer group" railroads such as WCS, because of the "returns on scale" achieved by the large Class I railroads. Id. at III.D-45. However, the LRR is all about economies of scale. It moves very large volumes of a single commodity exclusively in repetitive unit-train service, and bills all shipments on a trainload basis. It is thus hardly surprising that the LRR achieves huge "returns on scale" for largely irrelevant benchmarks such as revenue per employee.

> carriers are not necessarily a reliable indicator of the costs that would need to be incurred by the GCRR.

It is time for the Board to put an end to BNSF's continuing charade on G&A expenses. BNSF's recycled evidence in this proceeding is not indicative of appropriate G&A staffing and expenses for an efficient, one-commodity SARR such as the LRR, and it does not respond to the Board's Xcel I and TMPA II G&A findings in any meaningful way. The Board thus would be warranted in rejecting it out of hand.

Notwithstanding BNSF's failure of proof, because of the Board's proclivity to accept a SAC defendant's evidence if it is not directly rebutted by the complainant, WFA/Basin respond below to the specifics of BNSF's G&A evidence.

i. Staffing Requirements

In their opening evidence, WFA/Basin proposed a G&A staff of 50 employees, organized into a President's Office and three departments responsible for the LRR's principal staff functions: an Operating Department (with two sub-departments responsible for the transportation/customer service/marketing function and the engineering/mechanical function), a Finance/Accounting Department, and a Law/ Administration Department. The latter department is also responsible for the human resources function.

On Reply, BNSF proposed to move 12 Operating Department employees from the G&A employee category to the Operating employee category, and it increased the total G&A staffing to 66 employees (78 if the 12 removed employees are restored to the G&A category). The 12 employees BNSF wants to move to Operating include the Director of Marketing & Customer Service and 11 Customer Service Managers. BNSF Reply at III.D-19, III.D-58 and III.D-70. However, these categories of employees were treated as G&A employees in Xcel I (id. at 65), and also in TMPA I (id. at 96). Consistent with those decisions, and for purposes of comparison, WFA/Basin continue to treat these employees as G&A employees. (Both parties agree on the number of employees required to staff these positions; see Table III.D.3-1 at BNSF Reply Narr. III.D-19.)

The G&A staffing proposed by WFA/Basin and by BNSF (including the 11 employees described above in order to make an apples-to-apples comparison) is set forth in Rebuttal Table III-D-4 below. WFA/Basin's G&A, marketing and IT experts, Messrs. Reistrup, Smith, Weishaar and Kruzich, do not believe any change from the staffing level they proposed on Opening is warranted.

Rebuttal Table III-D-4 Comparison of Parties' General & Administrative Staffs			
Department/Position	WFA/Basin	BNSF	Difference
Executive (excludes outside Directors)	3	3	0
President and CEO	1	1	0
Director, Corporate Relations	1	1	0
Administrative Assistant	1	1	0
Operations (including Marketing)	19	21	2
Vice President-Transportation	1	1	0
Vice President-Chief Engineer & Mechanical	1	1	0
Administrative Assistants	2	2	0
Manager of Operating Rules & Safety	1	1	0
Vice President Marketing	0	1	1
Secretary/Administrative Assistant	0	1	1
Director of Marketing & Customer Service	1	1	0
Marketing Managers/Mgr. of Coal Marketing	2	2	0
Customer Service Managers	11	11	0
Finance and Accounting Department	13	28	15
Vice President-Finance & Accounting	1	1	0
Administrative Assistant	1	1	0
Treasurer	1	1	0
Assistant Treasurer	0	1	1
Cash Manager	0	1	1
Director of Taxes	1	1	0
Controller	1	1	0
Assistant Controller-Revenue	1	1	0
Assistant Controller-Disbursements	1	1	0
Manager - Accounts Payable	0	1	1
Manager - Payroll	0	1	1
Manager Revenue Analysis	0	1	1
Manager Car Equipment Accounting	0	1	1

Disbursement Clerk	0	1	1
Manager Misc. Billing	0	1	1
Director - Internal Audit	0	1	1
Director - Financial Reporting	0	1	1
Manager of Financial Reporting	1	1	0
Sr. Financial Analyst	0	2	2
Revenue Accounting Clerks	0	3	3
Director Budgets and Analysis	0	1	1
Director of Purchasing	0	1	1
Manager of Budgets and Purchasing	2	0	(2)
Manager of Administration	0	1	1
Manager of Purchasing	0	1	1
Manager of Real Estate	0	1	1
Clerk/Analysts	3	0	(3)
Law and Administration Department	**15**	**26**	**11**
Vice President-Law & Administration	1	1	0
Administrative Assistant/Secretary	1	0	(1)
Secretary/Paralegal	0	1	1
General/Staff Attorneys	2	2	0
AVP - Human Resources	0	1	1
Director - Human Capital (Resources)	1	0	(1)
Secretary/Administrative Assistant - HR	0	1	1
Director -Safety & Loss Control	0	1	1
Manager of Safety and Claims	1	0	(1)
Manager -Safety	0	1	1
Claims Manager	0	1	1
Manager - Recruitment	0	1	1
Manager - Personnel	0	1	1
Human Resources Coordinator	0	1	1
Director - Compensation & Benefits	0	1	1

Manager of Training	1	1	0
AVP - Information Technology	0	1	1
Director - Information Technology	1	0	(1)
IT Specialists	7	11	4
Total G&A employees	**50**	**78**	**28**

WFA/Basin address below the differences between the parties' staffing for each department.

(a) Executive Department/Board of Directors

As shown in the above table, the parties agree on the employee staffing and functions for the LRR's Executive Department. See BNSF Reply Narr. at III.D-59. However, BNSF proposes to increase the size and composition of the LRR's Board of Directors from five (with three outside directors), as proposed by WFA/Basin, to seven (with at least five outside directors). Id. at III.D-62.

The size and composition of the LRR's Board of Directors is identical to that approved by the Board in Xcel I and TMPA. In Xcel, where the complainant had proposed a three-person Board of Directors for its SARR, BNSF itself asserted that a five-person Board was appropriate. The degree of oversight required by the directors is comparable in both cases given the similarities between the two SARRs.

BNSF now claims that the real-world railroads that are "comparable" to the LRR have a minimum of seven directors, and that since the TMPA and Xcel cases were decided some smaller railroads such as KCS (which formerly had five directors) have increased the size of their Boards to seven or more directors. BNSF Reply Narr. at III.D-62 to 64. However, BNSF's benchmark or "peer group" comparisons are of little relevance in assessing the need for a larger Board of Directors. The companies involved are (or were) publicly-traded companies and railroad holding companies, and they operate far more complex railroads than the LRR in terms of customer and traffic mix. The LRR is not publicly traded and is not subject to the same level of financial-governance scrutiny as a publicly traded company (the recent spate of corporate financial scandals have all involved publicly-traded companies). Nor is the LRR subject to the Sarbanes-Oxley Act, in particular Section 404 which requires public companies to undergo an annual evaluation of their internal controls and procedures for financial reporting, as well as assess the effectiveness of those controls. In short, notwithstanding BNSF Witness McCarren's belief that the LRR "should" have a seven-person Board (id. at III.D-62), a seven-person Board is not required for a company such as the LRR.

Mr. McCarren also "believes the board should have a non-executive chairman drawn from the ranks of outside directors," and that the outside directors would "demand" compensation "commensurate with their service" (which he pegs at $40,000 annually, including travel and expenses. Id. at III.D-62 to 64. Mr. McCarren's justification for these proposals is based on (1) the board composition and outside-director compensation of real-world, publicly-traced railroads, and (2) "[t]he recent focus on Director liability." Id. However, the "recent focus on Director liability" pertains to large, publicly traded corporations such as Tyco International, WorldCom, etc. The LRR is not a publicly traded company, and there is no reason to assume either that an outside Director must be the Board Chairman or that the outside directors (who would have a stake in the company) would insist on compensation packages comparable to those of publicly-traded real-world railroads. In short, WFA/Basin's proposal with respect to outside director compensation remains feasible and consistent with recent Board precedent (see Xcel I at 70-71), and should be accepted.

Mr. McCarren also "notes that based on public information about insurance in the railroad industry, LRR would pay approximately $750,000 for Directors' and Officers' Insurance." BNSF Reply Narr. at III.D-65. Mr. McCarren provides no supporting documentation for this statement. In particular, Mr. McCarren provides no evidence that privately-owned (as opposed to publicly-traded) companies provide directors' and officers' insurance at all – much less that the premiums would approach $750,000 per year. Moreover, BNSF (like WFA/Basin) has already included insurance costs as a separate category of operating expense for the LRR. As this insurance cost is based on what publicly traded carriers actually pay for insurance, to the extent directors' and officers' insurance is paid by these carriers, it is included in that cost.

(b) Operating Department/Marketing Function

WFA/Basin proposed a single Operating Department, with two Vice Presidents. The Vice President-Transportation would supervise the transportation, customer service and marketing functions. The Vice President-Engineering & Mechanical would supervise the engineering (including MOW) and mechanical functions. See WFA/Basin Op. at III-D-39 to 45.

BNSF accepts WFA/Basin's proposed Operating Department, including its personnel and functions, except in one respect. BNSF proposes a separate Marketing Department, headed by a Vice President with his own Secretary/Administrative Assistant. Notwithstanding all the smoke in BNSF Witness McCarren's lengthy discussion of the marketing function (BNSF Reply Narr. at III.D-65 to 73), the net result is to increase the staffing covered by the Operating Department by a grand total of two employees – the Vice President Marketing and the Secretary/Administrative Assistant. See BNSF Reply Narr. at III.D-57 to 58.

There is no reason for a separate marketing department except to jack up the LRR's G&A staff and salaries unnecessarily. WFA/Basin Witnesses Reistrup and Smith lodged both the marketing and the related customer service function in the same department, under the supervision of a Director of Customer Service who reports to the Vice President-Transportation.[30] This staffing arrangement, and the staffing level, was also endorsed by WFA/Basin Witness David Weishaar, who superintended the coal

[30] As noted earlier, and perhaps to bootstrap its arguments for a separate marketing department, BNSF proposes to divorce the marketing and customer service functions and treat the employees involved in customer service as Operating employees. As also noted earlier, this is inconsistent with the Board's (and, in fact, BNSF's) treatment of these functions in Xcel I and TMPA.

marketing function for CNW and WRPI prior to their acquisition by UP ten years ago. See WFA/Basin Op. Narr. at III-D-41 to 45.[31] WFA/Basin's experts provided a small in-house marketing staff of two persons (the same staffing proposed by Mr. McCarren, except for the separate Vice President and Secretary/Administrative Assistant) to assist the marketing contractor. In addition, the Director of Marketing & Customer Service (the equivalent of BNSF's proposed Vice President-Marketing) and the 11 Customer Service Managers perform marketing-related functions as they interface with the LRR's customers and the PRB mine operators.

In assessing the LRR's marketing needs it must again be kept in mind that under SAC theory the LRR is a replacement for BNSF with respect to the transportation it provides to its customer group. It does not compete with BNSF. Without the LRR, BNSF would not transport the cross-over coal traffic that comprises the vast majority of the LRR's volume (the LRR's only local movement is the LRS movement). BNSF thus would have every incentive to market both carriers' coal transportation services in much the same manner as it does in the real world.

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[31] BNSF Witness McCarren dismissed Mr. Weishaar's testimony by briefly noting that CNW's Energy Marketing department under Mr. Weishaar was substantially larger than the LRR's as proposed by WFA/Basin. BNSF Reply Narr. at III.D-69. However, Mr. McCarren did not address Mr. Weishaar's testimony that the CNW/WRPI marketing function was much more complicated than the LRR's, and that if his department had been responsible only for marketing WRPI's coal transportation services (i.e. PRB coal originations and short-haul transportation to a connection with UP), its size would have been comparable to the LRR's marketing staff. See WFA/Basin Op. Narr. at III-D-44 to 45.

In this regard, Mr. Weishaar notes that UP had a coal marketing staff that was much larger than CNW's, and it certainly viewed itself as performing the lion's share of the marketing function for coal traffic that it interlined with WRPI. Leaving aside WRPI-originated coal movements that returned to CNW at Council Bluffs, WRPI's relationship with UP was very similar to the LRR's relationship with BNSF.

Mr. McCarren also attempts to distinguish Mr. Reistrup's performance of the Monongahela Railway's ("MGA") marketing function when he was President of that company[32] by noting that the MGA was owned by its connecting carriers (including Conrail), that Conrail was the primary connecting carrier for MGA-originated coal traffic, and that "the bulk of the coal marketing effort with respect to joint MGA-Conrail coal traffic was performed by Conrail employees in 1983-84." BNSF Reply Narr. at III.D-68 to 69. Mr. Reistrup first notes that, even if this statement were true (which it is not), it would be consistent with BNSF's undertaking most of the marketing effort for the LRR's coal traffic group as the LRR's primary (indeed only) connecting carrier. In any event, Mr. Reistrup further notes that Mr. McCarren was a Regional (field) Superintendent in Conrail's Operating Department in 1983-84 and was not involved in marketing MGA-originated coal. While Conrail marketing personnel were involved in marketing this coal, Mr. Reistrup took the lead in many instances. His efforts were successful, as the MGA changed from a money-losing railroad when he took over its marketing function to a

[32] See WFA/Basin Op. Narrative at III-D-43.

carrier that was earning net income of 20 percent after taxes when he left the MGA in 1992. The essential point is that a large marketing staff is not needed for successful marketing of coal transportation services by a short-haul originating carrier that interchanges most of its traffic to a much larger carrier.

In the Xcel case, the complainant proposed a six-person marketing and customer service staff and BNSF proposed an 18-member staff; the Board deemed a 13-member staff and most elements of BNSF's marketing proposal to be appropriate because "BNSF's marketing proposal is realistic and supported, whereas Xcel's proposal is not." Xcel I at 65, 67-68. In this case, the parties are in agreement on the number of customer service personnel needed by the LRR and differ by a total of two employees (one of whom is a Secretary/Administrative Assistant) for the marketing function itself. Unlike the situation in Xcel, WFA/Basin's proposed marketing staff is well supported by its opening and rebuttal evidence and should be accepted by the Board.

Mr. McCarren also takes issue with the $120,000 cost proposed by WFA/Basin for two out-sourced marketing support persons. Mr. McCarren assumes the LRR would have to pay for two people on a full-time basis, plus benefits. BNSF Reply Narr. at II.D-73 to 74. However, as WFA/Basin noted on Opening, the principal reason why the LRR out-sources marketing support is that a contractor has more flexibility in terms of providing people on a full-time or part-time basis, and out-sourcing enables the LRR to save the cost of paying salary and benefits for full-time employees. See

WFA/Basin Op. Narr. at III-D-34 and III-D-43 to 44. Mr. McCarren did not respond to this evidence, and he has provided no justification for assuming that the LRR would have to pay the entire cost (salary and benefits) for two full-time marketing-contractor employees.

(c) Finance and Accounting Department

WFA/Basin propose a total of 13 employees for the LRR's Finance and Accounting Department. BNSF proposes a total of 28 employees, or 15 more employees than proposed by WFA/Basin.

BNSF Witness McCarren's staffing proposal for this department is inconsistent with the Board's findings in Xcel I, where it accepted a total of 16 employees for a coal-only SARR that provided origination service in the PRB and (like the LRR) served only one local customer. Id. Mr. McCarren fails to mention Xcel I in his discussion of the finance and accounting functions. Instead, he once again relies on comparisons with the finance/accounting staffs of present and former real-world railroads, in particular WCS, that have (or had) annual revenue comparable to or lower than the LRR's annual revenue. Mr. McCarren also claims that the LRR needs more finance/accounting employees, notwithstanding its use of computerized programs and packages to handle many accounting functions that historically have been performed manually in the railroad industry, because WCS and other "peer"railroads use such packages and still have substantially larger finance/accounting staffs. See BNSF Reply Narr. at III.D-74 to 75.

Mr. McCarren's "peer" comparisons ignore two facts. First, the LRR's revenue and disbursement accounting needs are much smaller than those of WCS or any other real-world railroad because it carries a single commodity and bills all freight charges on a trainload basis. The volume of traffic carried is higher than for these other railroads, but the repetitive nature of the LRR's traffic and the small total number of customers involved[33] lend themselves to computerized billing and accounting to a far greater extent than the diverse traffic mix and equipment/service offerings of WCS and other real-world railroads. The functions that involve computerized packages and programs are described in detail at pp. III-D-49 to 62 of WFA/Basin's Opening Narrative and in the section below on the LRR's IT requirements.

Second, WCS and other railroads staffed themselves for the finance/ accounting function before today's sophisticated computerized accounting packages became available. Many of these packages became available only in the past decade and were add-ons. However, the nature of large organizations (particularly railroads) is that staffing does not change quickly in response to mechanization. The LRR, in contrast,

[33] The LRR has a total of 74 utility coal customers (73 interline, one local). Mr. McCarren does not quantify the number of customers the other comparison railroads have – only total annual revenue. Given the nature of the LRR's traffic group, the number of customers is a more relevant measure of comparison than total revenues.

starts out with the most modern computerized accounting packages available and can staff itself (from scratch) accordingly.

Other than citing inappropriate comparisons with real-world railroads such as WCS, Mr. McCarren offers little more than generalized opinion testimony to support his proposed additions to the LRR's finance/accounting staff.[34] Mr. McCarren does acknowledge that revenue accounting and analysis and various billing activity will be decreased compared with similar activity at WCS and other real-world railroads due to what he terms the LRR's "lack of traffic diversity," but argues that other functions such as the purchase of $50 million worth of track materials "would create exactly the same accounting workload regardless of whether only coal or a diverse mix of commodities will be hauled across them once installed." BNSF Reply Narr. at III.D-74 to 75. That is true, but WFA/Basin have provided personnel in both the Finance and Accounting Department and the Engineering sub-Department of the Operating Department to handle this kind of function. There is no reason why an efficient railroad with advanced computerized accounting packages needs legions of finance/accounting personnel to handle this kind of work.

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[34] See, e.g., the following statement in BNSF Reply Narr. at III.D-76 to 77 with respect to Mr. McCarren's proposed additional treasury employees: "With operations that substantial [referring to the LRR's average annual revenue of $410 million], and with the complexities inherent in running a modern railway network, more resources in this area are required."

WFA/Basin now turn to the specific finance and accounting functions discussed by Mr. McCarren.

Treasury function. In Xcel I, the Board rejected the complainant's proposal for a Finance and Accounting Department that consisted of 10 employees in part because it determined that Xcel had failed to provide a Treasurer's Office to handle cash management and other treasury functions, or a purchasing sub-department. Id. at 67. Accordingly, the Board accepted BNSF's proposal for this function (and the Purchasing function) and increased the total departmental staffing level by six employees, from 10 to 16. Id. at 65.[35]

Unlike the complainants in Xcel and other recent SAC cases, WFA/Basin have provided specific employees to cover both the treasury and purchasing functions. They have included a separate Treasurer, rather than attempting to have the Vice President-Finance & Accounting cover the treasury function. They have also included Assistant Controllers for Revenue and for Disbursements, two Managers of Budgets and Purchasing, and three clerks to handle the treasury, budget, cash inflow/outflow, and purchasing functions. The Treasurer works with the Assistant Controller-Revenue and the Assistant Controller-Disbursements to manage the LRR's cash inflows and outflows.

[35] The Board rejected BNSF's proposal to staff the Xcel SARR's Finance and Accounting Department with 12 additional employees, which would have increased the total employee count for this department to 28 – the same inflated number BNSF proposes in this proceeding for the LRR.

He also monitors debt payment requirements and interfaces with the contractor who manages the LRR's 401K retirement plan. See WFA/Basin Op. Narr. at III-D-46.

Mr. McCarren proposes to add two more employees to the Treasurer's staff, an Assistant Treasurer and a Cash Manager. He also proposes to add five Managers and a clerk to the Controller's staff. His justification for the additional treasury positions is as follows:

> Based on his experience at WCS and other regional companies, Mr. McCarren provides for an Assistant Vice-President-Treasurer and an Assistant Treasurer and two Cash Managers. This staff is considerably smaller than the seven person Treasury office at WCS; however, it does take into account the fact that LRR is not a public company. Nevertheless, [given its annual revenues]. . . LRR will be required to manage substantial cash flows and balances, and will have significant amounts of debt that need to be serviced.

See BNSF Reply Narr. at III.D-76 to 77.[36]

With respect to the need to "manage substantial cash flows and balances" and to service "significant amounts of debt," WFA/Basin's Witnesses Reistrup and Kruzich note that modern electronic billing and funds transfer practices permit the Treasurer and the Controller's staff to manage the LRR's cash flows and debt service

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[36] This entire passage was lifted verbatim (except for the change in the SARR's acronym) from Mr. McCarren's testimony on behalf of BNSF in the AEP Texas case. See BNSF Reply Narrative (Public Version) filed May 24, 2004 in Docket No. 41191 (Sub-No. 1), at III.D-72. The SARR in that case was several times longer than the LRR and had a different traffic mix that included intermodal and other merchandise traffic in addition to coal.

without the need for additional support personnel. In light of these modern approaches to fulfilling the Treasury function, BNSF's proposed staffing of that function is outdated and excessive, and would leave the involved staff members largely idle.

Controller/disbursement function. WFA/Basin proposed staffing of a total of six persons to cover these functions, including one Controller, two Assistant Controllers, and three Clerk/Analysts. BNSF proposes a larger staff of nine persons to cover these functions. BNSF's staffing includes one Controller, two Assistant Controllers, one Manager-Accounts Payable, one Manager-Payroll, one Manager Revenue Analysis, one Manager Car Equipment Accounting, one Disbursement Clerk, and one Manager Misc. Billing. See BNSF Reply at III.D-77 to 78. BNSF's principal justifications for its inflated staffing are that "LRR is not a low-traffic railroad" and WCS had a comparable staff for these functions. Id. at III.D-77 to 78. Neither justification is valid. The volume of traffic carried by the LRR is not as important for purposes of G&A staffing as the nature of that traffic – coal carried exclusively in repetitive unit-train service. WCS's traffic mix was highly varied and it had a much larger number of customers than the LRR. The LRR's revenue and disbursement accounting functions lend themselves to automated (computerized) handling to a far greater extent than was achievable by WCS.

With respect to the payroll function, WFA/Basin noted on Opening that the Controller's Office would oversee the outsourced payroll function, assisted by the three

Clerk/Analysts described previously. See WFA/Basin Op. Narr. at III-D-47 and Op. electronic workpaper file "LRR GA Outsourcing.xls." On Reply, Mr. McCarren opines that "even with paycheck preparation itself outsourced, considerable oversight and correction activity will be required." See BNSF Reply at III.D-78.[37] On the basis of this observation, Mr. McCarren argues that a separate Manager is required to supervise the payroll function. However, Mr. McCarren has failed to demonstrate that this out-sourced function cannot be handled adequately by the Assistant Controller-Disbursements, assisted by the three Clerk/Analysts.

Financial reporting function. In their opening evidence, WFA/Basin proposed one Manager of Financial Reporting to staff the financial reporting function. See WFA/Basin Op. Narr. at III-D-47. They noted that one individual is sufficient to perform the LRR's financial and accounting reporting functions because the LRR is not a publicly-held company and does not need to prepare reports to the SEC or to the equity-investment community.

On Reply, BNSF's Witness McCarren insists that a total of seven individuals are needed to perform this function. The positions he proposes include a Director-Financial Reporting, a Manager of Financial Reporting, two Senior Financial

[37] Mr. McCarren also states in this regard that he checked with LRR's proposed payroll contractor, Paychex, and "learned that Paychex would require all payroll inputs to be submitted to them in electronic format, which will need to be done by the LRR." Id. at III.D-78. However, the LRR has three Clerk/Analysts who can prepare the electronic submissions.

Analysts, and three Revenue Accounting Clerks. Mr. McCarren's only explanation for the increased level of staffing is that WCS employed seven people to perform this function, so four are required by the LRR because it has half the level of operating expense of WCS. BNSF Reply at III.D-78. However, Mr. McCarren provided no evidence to support his arbitrary opinion that the LRR has half the need for financial reporting that WCS did. The LRR's financial reporting indeed should be substantially less because it is not a publicly-owned company. In addition, Mr. McCarren provides no explanation as to why both a Director and a Manager are necessary, no explanation as to why two "Senior Financial Analysts" were selected (as opposed to just "Financial Analysts" or no financial analysts at all), or what additional tasks would be performed by the Revenue Accounting Clerks.

Revenue issues/trends/analysis. BNSF proposes to add an entirely new sub-group to the LRR's Finance and Accounting Department to analyze "revenue issues and trends" and to resolve "substantive disputes that could not be quickly settled by revenue accountants." BNSF Reply Narr. at III.D-78 to 79. In particular, BNSF proposes that the LRR add one Manager to perform this work. According to BNSF, "in an ideal world, most of this work would not be required, [but] the real world of railroading includes overcharges and undercharges, systems' issues, miscoding of bills and a host of problems that need to be resolved." Id. at III.D-79. The description provided by BNSF for this function is consistent with the requirements of a carrier (WCS) that transports large volumes of single-car and mixed-freight traffic, not a carrier like the LRR that has only unit-train movements of a single commodity. Moreover, to the extent that this type of work conceivably could exist for the LRR, it would be performed by the Controller and his staff.

Equipment Accounting/Billing. BNSF proposes to add three employees with responsibility for equipment accounting and billing: a Manager of Equipment Accounting, a Disbursement Clerk, and a Manager of Miscellaneous Billing. BNSF Reply Narr. at III.D-79 to 80. BNSF indicates that the Manager of Equipment Accounting would "manage the car hire payable and receivable issues," oversee the "outsourced routine transactions," and "handle any financial transactions regarding foreign locomotives on the LRR or LRR's locomotives when off-line." Id. at III.D-79. The Manager of Miscellaneous Billing would handle "billing of non-freight items such as joint facilities, real estate leases and easements, locomotive and freight car repairs, *etc.*" Id. The Disbursement Clerk's responsibilities are unspecified.

BNSF has failed to justify the addition of these new employees. Most of The LRR's coal movements are in private cars, and all of the interline movements are with a single connecting carrier, BNSF. With respect to "miscellaneous billing," the LRR is not a party to any real estate leases, acquires a very limited amount of land (prior to the commencement of operations) through easements, and has no joint facilities with other rail carriers. The LRR's Assistant Controller–Disbursements (assisted, as necessary, by the three Clerk/Analysts) will have responsibility for these functions.

Internal Audit. On Opening, WFA/Basin provided for the LRR to out-source its auditing function, and included $250,000 to cover the cost of annual audits. See WFA/Basin Op. electronic workpaper file "LRR GA Outsourcing.xls." The Vice President–Finance and Accounting is responsible for interfacing with the LRR's outside auditor. On Reply, BNSF has added a Director of Internal Audit, claiming that "a company of this size should not operate without an internal auditor" and that "[n]o matter how well structured an organization may be at startup, it needs to evolve over time and a good internal auditor helps ensure that this evolution does not compromise the essential system of checks and balances in a large organization." See BNSF Reply at III.D-80.

Outside auditors are routinely employed by large, publicly-held companies that (unlike the privately-held LRR) have to comply with the Sarbanes-Oxley Act. They are not employed by many privately-held entities. It is fundamentally inconsistent with the stand-alone concept of a least-cost efficient SARR to employ a Director (at considerable cost) to do nothing other than to evaluate whether the other executives (and the redundant layers of management proposed in BNSF's evidence) are managing each other properly, particularly insofar as the LRR already is spending $250,000 per year to pay an outside firm to undertake auditing responsibility. An internal auditor is unnecessary and redundant.

Materials/Purchasing. WFA/Basin covered the purchasing function by providing two Managers of Budgets and Purchasing. These individuals handle the preparation of the annual company budget, supervise the overall corporate purchasing function, monitor monthly performance against planned peformance, and prepare required forecasts of both revenues and purchases. Id. at III-D-47 to 48. In addition, WFA/Basin provided for a separate Manager of Administration and Budgets in the Engineering/MOW Department to handle the budget and purchasing functions for track and other materials used to maintain the railroad. Id. III-D-97. These employees are ample to handle the materials purchasing function.

On Reply, BNSF proposes to replace the two Managers of Budgets and Purchasing proposed by WFA/Basin with a Director Budgets and Analysis, a Director of Purchasing, and a Manager of Purchasing. See BNSF Reply at III.D-80. BNSF provides no substantive justification for replacing two Manager positions with two Director positions and adding a third (Manager) employee for the Purchasing function. Rather than describing the specific tasks these employees would perform, BNSF simply declares that the LRR needs "a centralized purchasing function" because "[the] LRR will have substantial purchasing requirements, in excess of $20 million annually" and "larger purchases will invariably need review and approval at headquarters." Id. at III.D-80. However, centralization of the purchasing function (and the related budgeting function), and "review and approval at headquarters," are exactly what WFA/Basin contemplated by staffing the Finance and Accounting department with two Managers of Budgets and Purchasing and the Engineering/MOW department with a Manager of Administration and Budgets.

Moreover, there is no logical reason why a least-cost, optimally efficient SARR would employ two Directors to oversee two Managers (assuming the Manager of Administration, which BNSF retains but does not discuss, is supposed to report to one of the two Directors). WFA/Basin Witness Reistrup observes that, in his experience, no Director-level employee should be added to a staff without at least five direct reports. Otherwise, there is insufficient work for the supervisor to supervise and administration becomes an end in itself (which leads to inefficiency).[38] BNSF's proposed Director positions thus are unnecessary, and BNSF has not shown that WFA/Basin's proposed staffing is inadequate in any way.

Real Estate. The LRR is sized at the outset for its peak-year traffic. It acquires all of the real estate it needs for its right-of-way, yards, buildings and other facilities prior to construction. The LRR has no need for any full-time real estate

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[38] In this regard, according to BNSF's Table III.D-11 (see BNSF Reply Narr. at III.D-57), BNSF also proposes to add a Manager of Administration. This is mystifying as BNSF does not discuss this position anywhere in its Reply Narrative. Given the plethora of other Managers Mr. McCarren proposes to add to the LRR's Finance and Accounting Department, one can only speculate that Mr. McCarren believes a separate Manager of Administration is needed to keep track of all the other Managers.

personnel because it will not be acquiring or selling any real estate during its 20-year existence under the DCF model.

Notwithstanding these facts, BNSF proposes to add a Manager of Real Estate to the LRR's Finance and Accounting Department, arguing that such a person is necessary because the LRR will face issues related to "crossing, licenses and easements for utility lines, cable TV and the like." BNSF Reply Narr. at III.D-81. Significantly, while BNSF insists that an additional employee is needed to interact with entities seeking easements across the LRR's lines, BNSF does not credit the LRR with any revenues associated with such easements. In Mr. Reistrup's experience, the annual revenue from such easements for a railroad the size of the LRR would exceed the salary of a Manager of Real Estate. While it may take some time to negotiate agreements regarding such access, BNSF has not explained why a full-time employee is required to perform this function. The LRR's Assistant Controller–Revenue (assisted, as necessary, by the clerks in the Controller's office) can easily handle the function.

BNSF's claim that a separate real estate specialist is necessary because the LRR's operations and facilities will change over time is incorrect. There is no plan to modify the LRR in a manner that would create a need to "acquire new property for new facilities." See TMPA I at 101-102 (rejecting BNSF's argument that real estate staffing was required and noting that "since no new facilities would need to be constructed after the GCRR's initial construction," there would be "no need for additional land and no corresponding need for a legal staff to handle real estate matters"). Finally, even if there were any other real estate-related issues that actually impacted the LRR, the Law and Administration Department is adequately staffed (and has an adequate outsourcing budget) to handle such matters.

Outsourced expenses. As indicated earlier, WFA/Basin included a cost of $250,000 for the annual audit. Mr. McCarren proposes to raise this fee to an arbitrary $275,000 even though WCS's audit fees were in the $250,000 range in 1999 and 2000, on the ground that auditing fees have increased since 2000 "[g]iven the increased scrutiny of corporate auditing in recent years." BNSF Reply Narr. at III.D-81-82. However, the $250,000 cost used by WFA/Basin is reasonable based on WCS's fee and the fact that the LRR is not a publicly-traded company.

(d) Law and Administration Department

The parties differ by 26 employees in their staffing for the LRR's Law and Administration Department. WFA/Basin proposed 15 persons for this department, which is actually one more person than the staffing level approved by the Board for this department in Xcel I (id. at 65). BNSF proposed Law and Administration Department staffing of 30 employees in Xcel, and proposes a staff of 26 for purposes of this case.

WFA/Basin and BNSF propose much the same staffing for the legal function, i.e., a Vice President-Law and Administration, two in-house attorneys (which WFA/Basin calls General Attorneys and BNSF calls Staff Attorneys), and one assistant (which WFA/Basin call an Administrative Assistant and BNSF calls a Secretary/ Paralegal). They differ by two employees on the safety and claims function, which is part of the legal function. With respect to the Administration side of the department, BNSF proposes to break the Human Resources and IT functions into separate sub-departments, each headed by an Assistant Vice President. BNSF also includes additional unnecessary Directors and Managers as well as a new Human Resources Coordinator.

Safety and claims. Because the LRR out-sources the claims function, WFA/Basin staffed the Safety and Claims function with a single employee, the Manager of Safety and Claims. BNSF would replace this position with three new positions: a Director of Safety & Loss Control, a Manager of Safety, and a Claims Manager. See BNSF Reply Narr. at III.D-84 to 86.

BNSF's Witness McCarren reasons that the LRR needs a larger staff for the safety and claims function because real-world railroads such as WCS had larger staffs for these functions. A similar argument was made by UP in the FMC case. The Board rejected that argument on the following grounds:

> UP proposed that 16 employees would be needed to handle damage prevention and claims. FMC argues that a smaller staff could handle such duties because the ORR would not terminate a significant amount of traffic and because claims on coal traffic (a significant portion of the ORR's traffic) would be infrequent. Here, FMC has a point. Because claims are generally filed with the terminating carrier and because claims on coal traffic are infrequent, it is reasonable to assume that the ORR could do with a smaller staff than proposed by UP.

See FMC at 166 (emphasis added). On the basis of this finding, the Board removed 14 of UP's proposed 16 claims personnel. Id.

Like FMC's stand-alone railroad, the LRR will terminate little of its overall traffic (only the LRS traffic). Unlike FMC's SARR, the LRR's traffic will be composed entirely of coal traffic. Accordingly, there is no basis for including BNSF's excessively large Claims staffing. On the contrary, the Manager of Safety and Claims included by WFA/Basin is sufficient to oversee the outsourced claims function (for which the LRR will pay $125,000, an amount BNSF has accepted). See BNSF Reply Narr. at III.D-84 to 85.

Human Resources. WFA/Basin provided for out-sourcing of the bulk of the Human Resources function, and staffed this function with a Director–Human Capital and a Manager of Training. See WFA/Basin Op. Narr. at III-D-49. In addition, WFA/Basin provided that the LRR would out-source its start-up and training needs. Id. at III-D-66. As a result, the primary responsibility of the Human Resources staff is to superintend the contractors who perform these functions.

On Reply, BNSF proposes several additions to the LRR's two-member Human Resources staff including: (i) upgrading the Director-Human Capital to an Assistant Vice President; (ii) adding a Director-Compensation & Benefits; (iii) adding two Managers (one for Recruitment and one for Personnel); (iv) adding a Human Resources Coordinator; and (v) adding a Secretary/Administrative Assistant. See BNSF

Reply Narr. at III.D-86 to 89. These proposed changes would yield a six-person staffing level for the Human Resources function, or triple the number of employees proposed by WFA/Basin.

BNSF first suggests that the Director–Human Capital that WFA/Basin proposed should be upgraded to an Assistant Vice President. WFA/Basin submit that this upgrade is unnecessary, and BNSF offers no justification for it whatsoever (stating only that "Mr. McCarren first revises the department by upgrading the Director–Human Capital to an Assistant Vice President"). Id. at III.D-88. BNSF provided no explanation as to why a least-cost SARR would need to make this change and, therefore, it should be rejected by the Board.

On Opening WFA/Basin provided for a Manager of Training in addition to the Director of Human Capital. In its Reply, after proposing to upgrade AEP Texas' Director to Assistant Vice President, BNSF proposes to add a new Director and two new Managers to the Human Resources function. This staffing is excessive, top-heavy and unreasonable for a least-cost efficient SARR.

The WCS, which Mr. McCarren cites at length in discussing the LRR's alleged human resources needs, employed a total of only three individuals to staff the Human Resources function in 1996.[39] At that time, WCS operated a total of over 2,000

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[39] Mr. McCarren served as the President and CEO of WCS from 1996 through 2001. See BNSF Reply at III.D-37.

route-miles and had over 2,000 employees, which is far more than the length and the total staffing level of the LRR. See Wisconsin Central's 1996 10-K filed with the Securities and Exchange Commission. The LRR will be equally capable of handling its human resources function with two internal employees by outsourcing the recruiting and training functions.

BNSF proposes to add two Managers, one of Personnel and one of Recruitment, because WFA/Basin did not provide an outsourcing budget for these two "critical" functions. BNSF Reply Narr. at III.D-86 to 87. However, WFA/Basin in fact included a recruitment outsourcing cost of 25 percent of the first year's salary for management personnel and $1,000 per employee for rank and file personnel. These amounts are based on the amounts accepted in Xcel I and cover outsourcing of recruitment costs. BNSF provided no explanation of why it added a Manager of Personnel or what this individual would do.

Finally, BNSF proposes to add a Human Resource Coordinator, but in support of this addition, comments only that if the LRR does not have a person who interacts directly with its rank-and-file employees, the employees will provide such interaction themselves by unionizing. BNSF Reply Narr. at III.D-88 to 89. This is sheer speculation; BNSF presents no evidence to support the assertion that the absence of one Human Resources Coordinator would cause the LRR to become unionized.

Overall Departmental Budget. With respect to the overall budget for the LRR's Law and Administration Department, BNSF asserts that the annual legal budget is only 0.4% of revenue compared with the "industry standard" of 1.1%, and that, based on comparisons with other Class I railroads, the expected legal expense for LRR "based on the amount of traffic it moves" should be increased from \$0.04 per 1,000 GTMs to \$0.23 per 1,000 GTMs. BNSF Reply Narr. at III.D-82 to 83. However, there is no reason to believe that the LRR will require the level of expenditure on legal fees incurred by these railroads.

BNSF's use of an average legal expense per GTM is meaningless. BNSF's regression analysis of legal expenses per GTM is dependent upon a regression of only six data points which include numerous anomalies. For example, the NS legal expense per GTM is about half that of CSX, even though NS is only slightly smaller than CSX on a GTM basis. The Soo Line legal expense per GTM is nearly the same as that of CSX even though the Soo Line has only one-tenth the GTMs of CSX. As a result, BNSF's hypothesized relationship between size and legal expense is highly dependent upon three data points: KCS, which is the smallest member of the group and has the highest legal expense/GTM, and BNSF and UP, which have the lowest legal expense/GTM ratios and are the largest carriers on a GTM basis.

BNSF's assumption that the differences in legal expenditures are caused by size also ignores items such as the fact that KCS has been involved in numerous transactions lately to acquire and divest subsidiaries, including gaining a majority ownership of Mexican carrier TFM S.A. de C.V. and acquiring the remaining portion of the Texas Mexican Railroad. Financial transactions necessitate legal expenditures, so KCS would be expected to have high legal costs relative to its size. KCS's high legal expense per GTM apparently has more to do with the KCS corporate strategy than its size. Furthermore, BNSF and UP's low legal expenses per GTM probably relate more to where and how they operate than size. Both also generate higher GTMs per general level of activity, run the heaviest trains (over 10% above average), and have the longest hauls (62% above average) of all Class I railroads.[40] If anything, because the LRR is a heavy-haul, coal-only railroad, it, like UP and BNSF, would be expected to have low legal expenses per GTM. (As shown in BNSF Figure III.D.3-14, UP and BNSF have the lowest legal expense per GTM of any of the six carriers included in BNSF's review. See BNSF Reply Narr. at III.D-84.)

Further, publicly traded companies are required to disclose legal proceedings in their Form 10-K filings with the Securities and Exchange Commission. WFA/Basin have gathered the legal-proceedings sections from a number of these carriers' 10-K Reports, and reproduce them their Rebuttal electronic workpaper "Railroad Legal Proceedings.doc." These documents demonstrate that the Class I carriers have legal expenses for litigation that are not pertinent to the LRR. Among Class I carriers' legal

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[40] See WFA/Basin rebuttal electronic workpaper "Analyze RR Traffic.xls."

proceedings inapplicable to the LRR are Superfund litigation, a shareholder lawsuit, several legal actions involving spills of hazardous shipments, and a lawsuit stemming from the divestiture of a subsidiary. BNSF's "support" for its bloated legal department budget and $500,000 for outside counsel is illusory and must be rejected.

BNSF also asserts that the annual budget for outside counsel should be raised from $125,000 to $500,000. BNSF Reply Narr. at III-D-93. The principal basis for this increase is that other regional carriers, including WCS, MRL and DM&E/ICE, spent substantially more per year (in the range of $900,000 to $1.8 million) on outside counsel. However, BNSF provided no specific support for its $500,000 number other than to acknowledge that the outside counsel fees of other regional carriers should be reduced because of the LRR's "smaller number of employees and mileage." Id.

BNSF's proposed $500,000 number not only is unjustified, it is excessive. The LRR operates in a single state, it is a privately-held company, it carries a single non-hazardous commodity that has a history of very low loss-and-damage claims, it does not perform significant amounts of switching activity (which tends to generate FELA claims), and it has no need to acquire additional real estate after start-up. For these reasons outside counsel fees are likely to be at a minimum and the $125,000 annual budget WFA/Basin provided on Opening is adequate.

The outsourcing of various IT functions is discussed below.

ii. **<u>Information Technology</u>**

WFA/Basin lodged the LRR's IT function in the Law and Administration Department. This function is staffed by a Director-Information Technology (who reports to the Vice President-Law and Administration) and seven IT Specialists. The LRR's IT requirements, related hardware and software, and IT staffing are described in great detail at pp. III-D-49 to 62 of WFA/Basin's Opening Narrative. This evidence was sponsored by WFA/Basin's IT expert, Joseph Kruzich. Among other relevant railroad IT credentials, Mr. Kruzich was the Chief Information Officer for KCS.

BNSF's IT evidence is sponsored by its overall G&A witness, Mr. McCarren. Unlike WFA/Basin Witness Kruzich, Mr. McCarren is not an IT expert and has no railroad IT experience. Mr. McCarren erroneously states that WFA/Basin included the LRR's IT personnel in the Finance and Accounting Department. <u>See</u> BNSF Reply Narr. at III.D-90. This is probably a carry-over from Mr. McCarren's IT testimony in the <u>AEP Texas</u> case, as the IT staff was placed in the Finance and Accounting Department of the SARR described in that case. Indeed, Mr. McCarren's discussion of the LRR's IT function is a re-hash of his IT testimony on behalf of BNSF in <u>AEP Texas</u>.

In any event, on Opening Mr. Kruzich developed the LRR's IT requirements based on the unique characteristics of this SARR: its operation of only unit trains carrying a single bulk commodity, its small geographic scope, its limited locomotive fleet, its moderately-staffed main office, and its small number of field locations. This combination of factors, which is unique to the LRR, greatly reduces the complexity of the computer systems required to support operations in comparison with other Class I and regional railroads.

Indeed, for a typical Class I railroad (and most regional railroads), the computer system requirements are very complex due to the large number of customers served, the large number of commodities handled, the need to accommodate thousands of different origin and destination pairs, the different railcar types required, the need for extensive yard operations to sort and block cars and support local switching activities, and the need to keep track of service commitments to customers on an individual car basis. None of these conditions exists on the LRR.

BNSF Witness McCarren, who is not an IT expert, recognizes that the LRR has different requirements than most railroads, but he nevertheless suggests additional IT investment that is unwarranted. He even argues that the LRR's IT requirements are extraordinary because it operates at a high productivity level. See BNSF Reply Narr. at III.D-89 to 90. However, Mr. McCarren does not offer any concrete examples to show why the systems specified by WFA/Basin's Witness Kruzich are inadequate for their tasks. Indeed, he selected the same main train-operations system, the RMI Transportation Management System ("TMS"), that Mr. Kruzich selected.

Moreover, handling unit coal trains, even in large numbers, does not require a highly sophisticated IT system similar to BNSF's, but a reliable system such as RMI.

Indeed, what makes IT especially challenging on even medium-sized or small railroads, let alone BNSF, is the significant amount of traffic of different kinds competing for the same rail system, which in turn requires very sophisticated computer systems to plan and forecast train movements. Mr. Kruzich's experience with RMI systems proved to him that RMI's TMS system is more than adequate for the LRR.

The problem with BNSF's overall IT approach is that it does not differentiate information technology needs between the LRR's coal unit-train operations and the more varied train operations of BNSF, WCS, or other railroads' operations that handle numerous commodities, various car types, hundreds of customers, hundreds of origin and destination pairs, significant yard operations at multiple points, etc. – even though BNSF pays lip service to the differences.

For example, BNSF does not take into consideration the difference between computer transactions processed by these railroads and the LRR. At the very least WCS, BNSF and the other railroads cited by Mr. McCarren have several times more computer transactions to handle one carload from origin to destination than the LRR's coal unit-train operation. In particular, for WCS to handle a typical carload, a transaction would be created to process the shipper car order, create yard blocks, assign a local or industry job to deliver car to customer, assign a local or industry job to pickup the carload at customer's location, create train block to destination, create yard blocks at destination, and assign to local or industry job to deliver the carload to customer. In contrast, for the

LRR to process a carload in its unit-train environment, a transaction would be created to establish a train number, assign a crew to take an empty train from its one local destination (LRS) or interchange point with BNSF to the mine for loading, and assign a train crew to pick up the loaded train and deliver it to LRS or the BNSF interchange point. Thus there is a huge difference in computer transactions needed to handle carloads in the LRR's coal unit-train operation compared with the transactions required by another railroad to handle carloads in a multi-commodity and multi-train-type environment.

(a) Staffing

BNSF argues that the LRR's IT department needs an Assistant Vice President position rather than the Director position proposed by WFA/Basin, and BNSF also included additional three IT specialists on the ground that WFA/Basin's staffing level does not include 24-hour tech support. BNSF Reply Narr. at III.D-90 to 91. Mr. Kruzich disagrees with these additions.

BNSF notes that other railroads such as the WCS, KCS, G&W and MRL have Assistant Vice President positions. However, these railroads' IT department heads have more responsibilities because their related IT requirements are more complex and require more staffing. Thus, the need for an AVP-level IT department head is justified for these railroads. In Mr. Kruzich's view, the Director position is adequate to handle all of the LRR's IT needs since many IT functions are essentially contracted out to RMI. In addition, the LRR's IT staff will not have large customer data bases, blocking tables, origin/destination tables, commodity tables, etc., to maintain. Moreover, the LRR's data bases will be much smaller and have fewer complexities than, for example, the WCS's – thereby requiring fewer IT resources. As such, a Director-level position will have responsibility for a budget and program similar in scope to other LRR Director-level employees.

BNSF also suggests that WFA/Basin did not provide 24/7 coverage for the LRR's IT operation, and therefore added three more IT specialists. Id. at III.D-91. This is incorrect. On page III-D-60 of WFA/Basin's Opening Narrative, Mr. Kruzich detailed the 24/7 coverage for the LRR's IT function – including 24-hour on-call support. Furthermore, in a small IT shop such as the LRR's, specialists are trained to handle multiple types of tasks, as required. Mr. Kruzich again notes that the main transportation system is outsourced to RMI, which is responsible for any maintenance – except for particular connection or configuration issues in the LRR's offices, which will be handled by the in-house IT staff.

BNSF also proposes an additional IT specialist for development of e-commerce applications, maintenance, and IT security systems. BNSF Reply Narr. at III.D-91. This position is not needed because Mr. Kruzich has already included a programmer to handle this function. See WFA/Basin Op. Narr. at III.D-61. In addition, RMI's TMS system also provides e-commerce capabilities. See WFA/Basin Op. Workpapers Vol. 8, pp. 5020-5021. Further, many of the development functions that

BNSF argues for are already available in the RMI system. As for security issues, on Opening Mr. Kruzich provided for a bundle of security software systems to protect the LRR's IT environment and he provided a 15% allowance in the operating budget for security software maintenance.

Mr. McCarren also suggests that WFA/Basin did not specify who will be responsible for the voice communication network. See BNSF Reply Narr. at III.D-92. Mr. Kruzich questions whether Mr. McCarren bothered to read WFA/Basin's Opening IT narrative as this issue was clearly discussed on page III-D-61. In any event, this function will be performed by one of the seven technicians assigned to the IT Department. Each technician will have specific assignments. The voice communication network responsibilities will be assigned to one network specialist. The network engineer will also be responsible for overseeing network security matters and LAN/WAN issues. This position will also be responsible for planning, designing, and managing transmission facilities, cabling and communications devices. This position will also handle any telecommunications issues that may occur.

This staffing is more than adequate to handle the LRR's voice communications needs. While at KCS, where the telecommunications system was much more complex than the LRR's, Mr. Kruzich supervised one lead person and one assistant that monitored the entire telecommunications voice system and the microwave system. The microwave system was outsourced to Comet Industries (the LRR also out-sources some communications systems work as discussed in Part III-D-4 below), and the telephone system was controlled by the central switchboard at Kansas City, which handled over 2,600 miles of railroad and over 1,000 telephone installations throughout the KCS system. The same voice communications monitoring and troubleshooting functions on the LRR can be easily absorbed by the network engineer due to the fact that LRR will only have approximately 100 telephones.

Finally, Mr. Kruzich notes that Mr. McCarren's overall staffing proposal is based largely on WCS' IT experience, which simply is not comparable to the LRR's IT requirements. WCS' IT requirements were much more complex because it served many more customers, thousands of origin/destination pairs, and undoubtedly had many more data bases, more sophisticated commerce applications, security systems, etc.

(b) Outsourcing IT System Needs

On Opening, Mr. Kruzich specified RMI's package of rail software solutions (RailConnect), and in particular its TMS system (plus some additional modules), in order to provide the LRR with its main operating functionality. On Reply, Mr. McCarren accepts the use of this system. However, he then argues that the system does not offer the breadth of functionality offered by major railroad operating systems such as BNSF's TSS, UP's TCS or CN's SRS, suggesting that the RMI system is only useful in its current state for small railroads. Thus, he argues that RailConnect must be supplemented by costly additions to the LRR's IT budget. Id. at III.D-94. These additions are unnecessary.

Mr. McCarren is correct that the RMI package does not offer all of the functionality available in the mainframe-based solutions used by BNSF or UP. Of course, the LRR is not a 30,000-mile, multi-commodity railroad, either. The LRR has only 218 route miles, and one type of traffic. Not surprisingly, the breadth of functionality required is even less than what a small railroad, handling mostly carload traffic, would need.

Even though Mr. McCarren accepts the RMI package, he suggests that it is not initially configured for a unit-train environment. Id. at III.D-95. However, he offers no support for this assertion, and Mr. Kruzich strongly disagrees. A unit train runs from one origin to one destination with a possible interchange in between. This is a straight-forward operation compared to the operations of regional railroads that use the RailConnect system to serve numerous origins and destinations, multiple commodities, and hundreds of customers. Yet experience shows that the RailConnect system is entirely suitable for their needs. It is also suitable for the LRR's needs.

Despite Mr. McCarren's acceptance of the RMI system, he attacks it further by noting that in 1999-2000, WCS explored moving to the RailConnect system to reduce its IT operating expenses but determined it would remain with TCS due to the extra functionality. Id. Mr. McCarren's statement is telling in that he later notes that WCS budgeted 2.8% of revenue in its final year of operation for the TCS system with all its functionality, yet he proposes a budget of 4.4% of revenue (including additional out-sourcing) for the LRR's IT operation whose functionality requirements are far less. Id. at III.D-102. Obviously, there is a disconnect in Mr. McCarren's position when a complex mainframe system requires less budget resources than the system that Mr. Kruzich proposed.

Against this backdrop of attacks on the functionality of the RMI system, Mr. McCarren then proposes a number of individual additions to the LRR's IT system. First, he argues that the LRR needs a train planning and reporting module and a coal train forecasting module. Id. at III.D-95. Mr. Kruzich agrees that the LRR needs some simple type of planning and reporting module to start with, and probably a coal train forecasting module in the future as volume increases. However, the LRR does not need to spend $150,000 to purchase these systems because its IT staff has a programmer who can develop these systems in-house. Mr. Kruzich estimates that it would take no more than 300 man-hours to develop the train planning and reporting module. This programmer will later develop a simple coal train forecasting module for future LRR use. These systems need not be as sophisticated as BNSF's systems, but instead, can be tailored to meet the specific needs of the LRR's narrower range of operations.

Next, Mr. McCarren proposes a $200,000 website for the LRR. Id. Mr. McCarren offers no support for his figure nor does he even suggest that a website could be developed in-house. Instead he mentions only that the DM&E is going to spend

$300,000 on custom programming to supplement RailConnect, but he does not explain what that programming is for or how it relates to his unsupported website budget.

Mr. Kruzich disagrees with BNSF's proposed website budget. To be sure, the LRR will need a basic website to provide direct communications to the few customers it serves, but the LRR can develop this web site in-house in less than 150 man-hours using the web developing tools already provided by Mr. Kruzich on Opening.

Mr. McCarren further proposes that the LRR spend $200,000 annually on outsourced expenses for system development and replacement connected with its use of RailConnect. Id. at III.D-96. Mr. Kruzich disagrees with this proposal because it is too general and does not specify what project(s) would be outsourced. Moreover, Mr. Kruzich notes that additional computer program development should not be necessary to accommodate repetitive unit-train operations for a known group of customers.

Mr. McCarren proposes that the LRR acquire a complex maintenance-of-way software package system similar to the one currently in place on CSXT. Id. at III.D-97. Mr. Kruzich disagrees with this proposal because the LRR does not have the same type of operations as CSXT, which has many times the route miles of the LRR. A simple PC-based reporting system is adequate to track maintenance-of-way activity. This reporting system will be developed by the LRR's Engineering staff with assistance from the IT programming staff. With only 218 route miles, the LRR simply does not require the kind of elaborate system that BNSF describes.

Mr. McCarren also argues for a car repair billing system. Id. at III.D-98 Mr. Kruzich disagrees with this additional package because the LRR's car inspectors can use a standardized worksheet placed on a clip board to gather the necessary information. This worksheet data can than be inputted into a standard PC spreadsheet application to provide all the car repair billing information needed. This information can then be used by the Accounting Department to issue the car repair bill to the appropriate party. This system is perfectly adequate because most of the cars used in the LRR's operations are privately owned cars, and the total quantity of such cars is small compared to the cars used by Class I carriers.

Mr. McCarren asserts that the LRR also needs a locomotive utilization and repair billing system because "most" large regional railroads have such a system (which means, of course, that there are also large regional railroads that do not have such a system). Id. at III.D-98 to 99. Mr. Kruzich disagrees that the LRR requires such a system. It represents an unnecessary cost that need not be incurred by an efficient railroad with only 218 route miles, a single-commodity unit-train operation, and just over 100 locomotives. Indeed, most Class I railroads treat locomotives assigned to unit-train operations separately from the rest of their fleets, assigning a particular type or types of locomotives suitable for unit-train coal service to a coal pool or to specific coal routes, whereas other locomotives move from origin to destination and are more or less randomly reassigned to another train. It would be inefficient for a railroad to break up a unit-train locomotive consist simply in order to permit the measurement of utilization.

Moreover, most railroads do not measure locomotive utilization in coal unit-train operations because it is assumed that the locomotives are being fully utilized while assigned to this service. When Mr. Kruzich worked for the ATSF (one of BNSF's predecessors) in the early 1990's, he managed the railroad's measurement systems. Unit coal train locomotives were excluded from the measurement reports. ATSF measured cycle times for coal unit trains, which can easily be done on the LRR by extracting information from RMI's TMS system. Measuring unit-train cycle time is an effective way of measuring locomotive performance and customer satisfaction.

Billing for locomotive repairs can be accomplished in the same manner as the car billing process discussed above. Mr. Kruzich disagrees that a special locomotive repair billing system is required, or even feasible. There is no need for such a duplicative system.

Mr. McCarren further suggests that WFA/Basin should have included additional costs to install AEI readers. Id. at III.D-99. The AEI readers will be installed by the LRR's maintenance forces as operations commence, which is what most other railroads do. There is no need to add a separate cost for the installation of AEI readers before the railroad even starts operating.

Mr. McCarren argues that the LRR needs to purchase a software product called InfoRail to monitor the testing and certification of railroad operating employees. Id. at III.D-99-100. Mr. Kruzich disagrees. Most railroads have their own internal systems for this function. This reporting system is a straightforward tracking system. The LRR has sufficient IT staff to develop this system on a PC-based spreadsheet application. Indeed, when Mr. Kruzich assigned one programmer to the LRR's IT staff, it was for just this type of systems development.

Repeating verbatim his testimony on behalf of BNSF in the AEP Texas case, Mr. McCarren claims that the MAS200 accounting system that Mr. Kruzich selected is not sufficient for the LRR's needs. Id. at III.D-100. His conclusions are based on a conversation with Mr. Brian Wilson, Sales Representative at Best Software, Inc., which is the maker of the MAS500, MAS200 and MAS90 accounting systems. According to Mr. McCarren, Mr. Wilson indicated that for a company the size of LRR, the MAS500 system would be the best-fitting product of the three, and that his company normally does not recommend MAS200 for companies exceeding $100 million in revenue.

As Mr. Kruzich noted in his testimony on behalf of the complainant in AEP Texas, it is not surprising that a sales representative for a software vendor would try to sell a more expensive product, and like most sales representatives, would be inclined to advocate the use of his most sophisticated product. The LRR, however, has outsourced its revenue accounting systems to RMI, which performs most of the accounting functions for the railroad. The MAS200 system is primarily used for accounts payable, accounts receivable, bank reconciliation, general ledger and timekeeping. The LRR has only one local customer, few vendors, less than 600 employees, and all of its billing is on a trainload basis. Therefore, it does not need a highly sophisticated system like the MAS500, notwithstanding the claims of the Best Software sales representative regarding the benefits of a more expensive product.

As in AEP Texas, Mr. Kruzich suspects that Mr. Wilson's recommendation was based on the assumption that the system would need to handle all accounting functions required by a typical large corporate organization, and, therefore, his opinion did not reflect the fact that the LRR's predominate accounting functions would be performed by RMI's Revenue Management System with only general accounting functions performed on the MAS200 system.

Mr. McCarren states that WCS used, and the Arkansas & Missouri uses, a similar product, MAS90. Id. He also states that the capabilities of MAS90 were strained at WCS. Mr. Kruzich is not surprised by this, but he notes that the LRR is not using the MAS90 system. The LRR will be using MAS200, which is a much larger system. According to Best Software's publications, the MAS90 is designed for medium-sized business (with 10 to 200 employees) whereas the MAS200 is a 32-bit version of MAS90 for Windows that incorporates client/server technology to add new capabilities. This is an extremely consequential difference. If the MAS90 was "strained" on the WCS, the

MAS200 would probably be the right fit for WCS. In other words, MAS200 is more than adequate to handle all of the LRR's general accounting functions.

Mr. McCarren has also updated the RailConnect module costs to those currently published by RMI.[41] When Mr. McCarren updated the RailConnect prices, he should have asked RMI to base the new prices solely on operating unit coal trains and other complete-trainload shipments (a point Mr. Kruzich also made in AEP Texas). Mr. Kruzich's Opening costs as indexed are reasonable because when Mr. Kruzich obtained the RMI price sheet in 2000, RMI indicated that if a railroad's operations were exclusively or predominately unit coal train a large discount (20+ percent) would be available because unit coal trains require much less in the way of computer resources than regular manifest and intermodal traffic. Also, the high volume of carloads would qualify for discounts as noted on the RMI price schedule. See WFA/Basin Op. Workpapers Vol. 9, p. 09133. If anything, the LRR's cost for RailConnect is overstated by almost $500,000 when considering the available discounts. Thus, WFA/Basin's Opening costs as indexed are sufficient.

For the first time, BNSF has proposed that the LRR's systems include the Freight Management System ("FMS") module from the RailConnect suite. Mr. McCarren argues that this system is necessary in order to provide customers with web-

[41] Mr. Kruzich tired to do the same, but RMI will no longer provide quotes to him for purposes of these cases. Mr. Kruzich suspects that BNSF and/or other Class I's which are large customers of RMI have leaned on that firm not to cooperate with consultants for shippers who bring rate cases.

based access to the railroad's system to determine the status of their shipments. BNSF Reply Narr. at III.D-101. Mr. Kruzich has examined this system and determined that LRR does not need this additional package. In particular, the FMS system is designed to track carload shipments and provide various reports related to those carloads. See BNSF Reply electronic workpaper "Shipper Connect–Freight Management Systems.pdf." While the TMS and RMS-portions of the RailConnect suite charge the carrier based on total carloads, the LRR shippers' data requirements are not carload-based. Coal unit-train shippers need to know the status and locations of their trains, not individual carloads. As such, $3,000,000+ a year for a system to track carloads is not necessary. Instead, Mr. Kruzich determined that the LRR can simply provide train location data on its website, which can be developed in-house and linked to the RMI TMS data that the LRR would receive in the ordinary course of operations.

BNSF proposes that the LRR acquire a back-up data line to connect to RMI in Atlanta. See BNSF Reply at III.D-102. WFA/Basin Witness Kruzich agrees that a back-up line is desirable and has added it to the LRR's IT budget.

BNSF further proposes that the LRR sign up for a virus, content and spam alert service at a cost of $1,166 per year. Id. Mr. Kruzich has already provided security software that will be sufficient for PC computer protection. This additional cost is unnecessary.

Finally, Mr. McCarren asserts that his overall annual IT budget of $9.4 million, or 4.4 percent of the LRR's revenues (as calculated by BNSF), is more appropriate than WFA/Basin's annual IT budget which is 2 percent of revenues. In support of this assertion Mr. McCarren compares his percentage to those of other railroads such as WCS (2.8 percent), KCS (6 percent), and RMI's estimate of such expenses for small railroads (2.5 to 4 percent). These comparisons are irrelevant to the LRR because they assume that all IT activities are the same on all railroads. This clearly is not the case with the LRR. As noted above, the IT requirements in a multi-commodity, carload-driven environment are significantly different than in an environment involving only coal unit trains.

For the foregoing reasons, Mr. Kruzich and WFA/Basin continue to use the IT capital costs and annual operating budget specified on Opening, with the addition of a backup data line to connect the LRR's systems with RMI in Atlanta.

iii. <u>Compensation</u>

WFA/Basin based the compensation for all G&A employees except the President and Vice Presidents on the data in BNSF's 2004 Wage Forms A and B for similar employees. The compensation for the President and Vice Presidents was based on the salaries and bonuses paid for similar executive positions by the KCS in 2003, with fringe benefits based on the ratio of fringes to total wages paid to all freight railroad employees in Wyoming in 2003 as reported by the AAR. See WFA/Basin Op. Narr. at III-D-62 to 64 and workpapers cited therein.

In its Reply Narrative BNSF asserts that WFA/Basin understated the compensation the LRR would have to pay the President and Vice President, based on comparisons with the compensation paid to senior executives by other rail carriers of various sizes. See BNSF Reply Narr. at III.D-103 to 109. BNSF does not discuss WFA/Basin's compensation proposals for G&A employees below the Vice President level, but it nevertheless adjusted the compensation for most of those employees upward, as well. In the absence of any explanation as to why WFA/Basin's proposed compensation for employees below Vice President is inappropriate, or any justification for BNSF's proposed higher compensation for these employees, WFA/Basin's evidence must be accepted.

WFA/Basin's proposed compensation levels for the LRR's President and Vice Presidents are based upon the compensation of KCS's officers. BNSF claims that WFA/Basin did not include all of the KCS executives' compensation, including stock options. BNSF therefore adds $80,127 to the LRR President's salary to supposedly account for the full amount of the KCS Chairman & CEO's compensation.

BNSF's incremental additive to the President's compensation is not justified. Despite claiming that WFA/Basin failed to include all of the KCS executives' compensation, BNSF never bothered to quantify what the additional compensation would be and instead selected arbitrary numbers on which to base the LRR's executive pay. If one assumes that this compensation additive is based on stock options, BNSF has not demonstrated that WFA/Basin should have included stock-based compensation. As of 2004, KCS did not recognize stock options as an expense. In its 2004 Form 10-K, KCS notes that "Company recognizes compensation expense pursuant to APB 25, whereby compensation expense is recognized to the extent that an option price is less than the market price of the stock at the date of the grant (the 'Intrinsic Value'). Because KCS's practice is to set the option exercise price equal to the market price of the stock as of the date of the grant, no compensation expense is recognized for financial reporting purposes." See WFA/Basin Rebuttal electronic workpaper "KCS 2004 10-K.pdf" at 70.

For Vice Presidents, BNSF estimated compensation levels at $325,000. BNSF's proposed executive compensation levels are arbitrary and less specific than those proposed by WFA/Basin. WFA/Basin used the KCS vice presidents' compensation as proxies for the analogous LRR vice presidents wherever possible. For example, the compensation of the KCS Chief Financial Officer was the basis for the compensation of the LRR Vice President–Finance & Accounting. Where there was no comparable KCS position, the average compensation of all KCS vice presidents was applied. In contrast, BNSF used a blanket estimate of $325,000 for all vice presidents, regardless of position. The STB accepted a similar approach to that used by WFA/Basin in Duke/NS I, stating: "Because relying upon salaries tied to the duties of a specific position is more reflective of the compensation for an individual job than relying upon a single, one-size-fits-all salary, Duke's evidence on executive salaries is used here." Id. at 76.

WFA/Basin's use of KCS as the basis for executive compensation is conservative. The KCS is a far larger, more complicated operation than the LRR. The KCS and its rail affiliates operate 6,000 route miles compared with the LRR's 218 route miles. KCS employs 2,680 employees compared with the LRR's 526 employees (per BNSF reply evidence) or 413 employees (per WFA/Basin's opening evidence). KCS also has other operating-affiliate companies, such as the Panama Canal Company and Southern Capital financing/lease company. Thus KCS executives are compensated for operating a far larger enterprise than the LRR. For these reasons, WFA/Basin's proposed executive compensation levels are more than adequate.

For other G&A personnel, BNSF inflated administrative compensation by consistently selecting the most expensive compensation categories and overstating executive compensation. For example, BNSF proposed that the average LRR managerial, professional, administrative (49 C.F.R. §1245.5) employee be paid $119,248 per year. The average actual BNSF employee within the code 100 and code 200 categories is paid only $81,576 per year (indexed to 4Q04).[42]

WFA/Basin based LRR Administrative Assistant salaries on BNSF 2003 Wage Form A & B compensation for code 212-Clerical Technicians and Clerical

[42] See WFA/Basin Rebuttal electronic workpaper "Compare BNSF Actual GA.xls."

Specialists. BNSF used code 214-Secretaries, Stenographers, and Typists for these same positions. Code 212 employees are paid $47,111/year, while code 214 employees are paid considerably more, at $67,178/year. Employees included in code 214 are relatively scarce at BNSF, comprising only 46 employees in 2003 compared to 482 code 212 employees at BNSF in 2003. The tasks of code 214 employees would not appear to apply to the LRR, so WFA/Basin's salary designation is more appropriate.

In Xcel I, the Board rejected the use of general clerk salaries for administrative assistant salaries because "an administrative assistant works directly for the President or vice presidents and would require a higher level of technical competence than a clerk technician." Id. at 70. However, WFA/Basin's Opening workpapers showed that its use of General Clerk salaries is appropriate for Executive Assistant compensation. According to a survey by Salary.com, the median expected income for an Executive Assistant is $41,267 nationwide and only $37,677 in Laramie, WY. Surveys by Payscale.com showed similar results with median Executive Assistant salaries ranging from $30,000 to $44,500 across eight states.[43] These compensation levels are below the $47,111/year salary included for Executive Assistants by WFA/Basin and far below the $67,178 salary proposed by BNSF.

For the following four positions, WFA/Basin used Code 201-Professionals, while BNSF used Code 102-Corporate Staff Managers.

[43] See WFA/Basin Op. Workpapers Vol. 8, pp. 04856-04861.

- Director of Taxes
- Assistant Controller - Revenue
- Assistant Controller - Disbursements
- Manager of Financial Reporting

Code 201 employees are paid $88,037/year while code 102 employees are paid $109,037/year. Code 201 includes Tax Accountants, Internal Auditors, Corporate Accountants. The four positions above are accounting in nature rather than managerial, so WFA/Basin's use of code 201 compensation levels is more appropriate.

For the Managers of Budgets and Purchasing, Safety and Claims, and Training, WFA/Basin used code 104-Transportation Officers/Managers, while BNSF used code 102-Corporate Staff Managers. Employees classified as code 104 are paid $91,069, whereas employees classified as code 102 are paid $109,037. The level of responsibility for these positions does not justify a code 102 salary and WFA/Basin continue to use the code 104 salary on Rebuttal.

WFA/Basin assigned a Director salary (Code 102) to the Director of Human Resources and Directory of Information Technology, while BNSF promoted each of these positions to the Assistant Vice President ("AVP") level with a salary of $275,000. This would correspond to a code designation of 101-Executives and General Officers designation. However, BNSF's executive count for the LRR is excessive. According to BNSF Wage Forms A & B, only 2.8 percent of BNSF's actual managerial, professional, administrative (Code 100 and 200 series) employees fall within category 101-Executives and General Officers. In contrast, BNSF is proposing that 9.9 percent of the LRR's professional, administrative, and managerial staff be at the AVP level or higher. This is a truly excessive number of officers, and BNSF has not explained why the LRR's organization needs to so much more top-heavy than its own. There is no justification for assigning AVP salaries to these employees.

iv. Materials, Supplies & Equipment

BNSF accepted WFA/Basin's unit costs for materials, supplies and equipment, but applied them to the different number of G&A personnel it proposed. BNSF Reply Narr. at III.D-111. BNSF also added various items of equipment (primarily company vehicles), as well as an additional $250,000 for "miscellaneous purchased services and other" to pay for items such as "janitorial service contracts, landscaping, catering, and other miscellaneous unplanned operating costs." Id.

The only basis provided for the $250,000 proposed by BNSF for miscellaneous services is that WCS spent approximately $1.7 million on such expenses in 1999. Id. BNSF has not demonstrated that the LRR would have to budget for such items. In fact, the LRR has no need for the extensive services that BNSF contemplates. For example, the LRR will not engage the services of landscapers and/or catering firms, and certainly cannot be expected to pay $250,000 per year for janitorial services especially since it has only one office building. While it is possible that the LRR would incur unforeseen/unplanned costs, BNSF has not provided any rationale for the budget it proposes.

With respect to company vehicles to be used by G&A employees (other than MOW and hi-rail vehicles), WFA/Basin has provided a pool of six Ford Explorers (based at the Guernsey headquarters) and five Dodge Dakota 4WD pick-ups. Except for two of the Dakota pick-ups (which are assigned to the car-inspection crews at Guernsey and Donkey Creek), these vehicles are not assigned to specific personnel but are pooled for use by various people as needed. See WFA/Basin Rebuttal electronic workpaper "LRR Operating Expenses Reb.xls."

BNSF has assigned vehicles to specific positions, with 21 Ford Explorers and three Dodge Dakotas for operating managers. Ten of the Explorers are for G&A personnel, although BNSF does not explain why so many company vehicles are needed (six are plenty for a pool as most G&A employees do not travel constantly on company business). Two of the Explorers assigned by BNSF are for crew haulers, which are unnecessary as explained in Part III-D-3-a-i-(a) above. The three Dakotas are for car inspectors, who are also equipped with all-terrain vehicles. However, only two of the Dakotas are needed by the inspectors – one assigned to the inspection forces at Guernsey and the other assigned to the roving inspection/repair crew based at Donkey Creek.

v. **Start-up and Training Costs**

The LRR's initial training and other start-up costs are discussed at pp. III-D-66 to 71 of WFA/Basin's Opening Narrative. In general, they were based on real-world training programs available for railroad operating and other employees.

Recruitment costs were based on the Board's decision in Xcel I, where it accepted a recruiting cost of $1,000 per employee for rank-and-file SARR employees and 25% of the first-year salaries for managerial and executive employees (the latter percentage was proposed by BNSF itself). See WFA/Basin Op. at III-D-68. In addition, WFA/Basin treated initial hiring and training costs as start-up costs not assignable to operating expense, and thus capitalized them. Id.; see also WFA/Basin Op. Narr. at III-H-1 to 3.

BNSF takes issue with WFA/Basin's calculation of start-up and training costs, beginning with a diatribe on the difficulties the western railroads have been having lately in recruiting train-crew personnel in particular. See BNSF Reply Narr. at III.D-113 to 115. However, most of its arguments are a re-hash of arguments the same witness (Mr. McCarren) presented in the AEP Texas case.

BNSF seeks to create an entry barrier of start-up and training costs, claiming that: "Unlike most start-up railroads developed in the past 20 years, LRR is not purchasing a line of railroad from BNSF with a pre-existing employment base. Thus, the recruitment task will be considerably greater than normally faced by new railroad companies." Id. at III.D-113 to 114. In essence, BNSF is arguing that, due to entry barriers and resource scarcity, the LRR's training and recruitment costs will be higher than the incumbent's. BNSF's argument is contrary to stand-alone principles and inconsistent with the Coal Rate Guidelines, where the ICC held that "[t]he costs and other limitations associated with these entry and exit barriers must be omitted from the SAC analysis in order to approximate the cost structure of a contestable market." Id. at 529.

BNSF continually refers to the UP's hiring practices as the benchmark by which to compare the LRR's training and recruiting costs. The UP has had one of the worst records in the railroad industry in terms matching personnel to traffic requirements. As noted in the Traffic World article that BNSF submitted in its workpapers[44] regarding crew shortages, "UP seems to have been hit harder and longer." In the same article, a UP representative admitted the railroad's problems, stating that the railroad "should have hired sooner." A hypothetical least-cost, most-efficient carrier's hiring and training expenses should not be based upon the practices of the least-efficient carrier.

(a) T&E Personnel Training

BNSF's estimates for the cost of training LRR T&E employees are in some cases illogical and in other cases disregard the evidence submitted by WFA/Basin on Opening. For example, on Opening, WFA/Basin calculated initial training requirements assuming that one half of the new conductors would be railroad novices and one half would be experienced conductors. Likewise, WFA/Basin assumed that one-half of all new engineers would have previous experience as a railroad engineer, and one half would be experienced conductors that are now being trained as engineers. On Reply, BNSF

[44] See BNSF Reply electronic workpaper "UP In a Jam.pdf."

assumed that 75% of all hires are novice conductors, 7.5% are experienced conductors, 7.5% are conductors becoming engineers, and 10% are experienced engineers.

BNSF's assumptions are illogical. One would assume that the LRR's T&E training should reflect the staffing requirements for two-person train crews, namely an even number of conductors and engineers. However, by BNSF's calculations, the LRR will train 82.5% of its new hires to be conductors and only 17.5% to be engineers.

It is more appropriate to assume, as WFA/Basin did, that the LRR would have a pool of potential candidates similar to what the incumbent draws upon. When BNSF seeks to fill a T&E position, it can shift an experienced employee from a similar job, promote an existing employee, or hire a new employee. WFA/Basin's assumption of one half experienced, one half promoted/novice is the most logical way to approximate this situation. This is the best, most fair estimate of the human capital resources that the LRR would be able to draw upon.

BNSF assumes that it would cost the LRR $42,514 to train a novice conductor. However, this estimate ignores WFA/Basin's Opening workpaper from BNSF's November 11, 2004 Financial Analysts' Meeting, which shows that it costs BNSF itself only $20,000 to train and recruit a conductor. BNSF never explains why it would cost the LRR 120% more (including $1,634 hypothesized for hiring, testing, etc.) than the incumbent to hire and train conductors. Had BNSF used $20,000 for conductor training rather than its estimate, the overall average training cost per T&E employee would have been $24,476 which is lower than WFA/Basin's Opening cost of $25,010 per employee.[45]

BNSF's overstatement of novice conductor training costs results from two factors: high conductor trainee compensation, and an assumed three additional weeks of classroom training. BNSF assumes that conductor trainees receive 80 percent of a { } salary, resulting in a cost per week of { } plus fringes for conductor trainee wages.[46] Evidence that WFA/Basin submitted on Opening demonstrates that this is not even close to reality. That evidence shows that CSXT pays its trainees only $715.83 per week.[47] WFA/Basin continue to use this amount for conductor trainee wages on Rebuttal.

BNSF also added three weeks of classroom training for novice conductors based upon BNSF witness McCarren's interview with David L. Davis, who trained conductors under contract for UP in 2004. On this particular issue, Mr. McCarren is conspicuously silent on either BNSF's own practices or those of WCS while he was President of that company, instead relying exclusively on Mr. Davis's opinion. BNSF's hypothesized eight to nine weeks of conductor classroom training (five to six weeks at an

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[45] See WFA/Basin Op. Workpapers Vol. 8, pp. 04999-5000.

[46] As discussed earlier, BNSF's proposed annual compensation of { }) for T&E personnel is greatly overstated. In addition, it is absurd to assume that a novice conductor trainee would be paid at the same rate as an experienced engineer or conductor.

[47] See WFA/Basin Op. Workpapers Vol. 8, p. 04958.

outside program plus three weeks at the LRR) defies common sense, considering that BNSF's conductor trainees receive only three weeks of classroom training in total.

Mr. Davis's opinions also contradict those expressed by another BNSF executive in a conversation with Mr. McCarren, the notes of which were provided in response to a WFA/Basin discovery request. In this conversation, BNSF Vice President Greg Stengem informed Mr. McCarren that BNSF is considering a move to replace its three-week classroom conductor training program with a six-week program at the JCC (Presumably the Johnson County Community College) with "no reimbursement."[48] There is no mention of additional BNSF-provided classroom training after the JCC. On Rebuttal, WFA/Basin continues to assume that novice conductors receive classroom training at an outside program at no cost to the LRR.

BNSF included 20 weeks to train conductors to become engineers, compared to the 17 weeks assumed by WFA/Basin. WFA/Basin's estimate is based upon FRA regulations. If the FRA believes that 17 weeks is a feasible amount of time to train an engineer, WFA/Basin see no reason to believe that a longer period is required.

BNSF agrees with WFA/Basin's assumed attrition rates of 20% for conductor training programs and 10% for engineer training programs, and that the average drop-out would leave after completing half of the program. Theoretically, if the trainee drops out half-way through the program, the LRR would incur half the cost of the

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[48] See WFA/Basin Rebuttal electronic workpaper "Training Phone Memo.pdf."

complete program. Therefore, attrition rates of 20% and 10% would increase the LRR's costs by 10% and 5%, respectively. Instead, BNSF's electronic workpapers show that it assumed no attrition for experienced hires, 20% for novice conductors, and 10% for conductors becoming engineers. BNSF's approach is illogical and WFA/Basin continue to use their Opening attrition rate assumptions in Rebuttal.

(b) Dispatcher Training

BNSF includes $40,091 per dispatcher for dispatcher training. This unsupported amount is contradicted by WFA/Basin's Opening workpapers, which include a copy of the Tarrant County College Railroad Dispatcher Program Application for Admission. This document indicates that candidates pay for their own training.[49] On page 3, the application indicates that sponsoring railroads sometimes help to defray expenses, which are estimated to be $2,500. WFA/Basin assumed that the LRR would pay these expenses, but that the candidates would otherwise pay for the programs. BNSF has provided no reason to dispute this reasonable assumption.

(c) Recruiting

BNSF's Reply average recruitment cost per employee is $6,466, compared to WFA/Basin's Opening cost of $4,638 per employee. The basis for WFA/Basin's calculation was the Xcel I decision, where the Board accepted a recruitment cost for the average "rank-and-file" employee of $1,000 and a recruitment cost for the average

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[49] See WFA/Basin Op. Workpapers Vol. 8, pp. 04793-04990.

management level employee of 25 percent of the first year salary. Id. at 75. On Reply, BNSF accepted WFA/Basin's cost to recruit management-level employees of 25 percent of the first year salary, but used a recruitment cost per non-management employee of $1,459 rather than WFA/Basin's $1,000. BNSF provided no support for its increased non-management employee recruitment cost.

WFA/Basin's assumptions concerning recruitment costs are conservative based on the Board's precedents prior to Xcel I. In TMPA, the Board ruled that the cost of recruitment for employees who were also trained would be zero. Id. at 85. The Board made similar rulings in Duke/CSX at 65, Duke/NS I at 79, and CPL at 67. Thus, WFA/Basin's evidence reflects $360,000 more in recruitment costs than is necessary under these precedents. BNSF cannot justify increasing the recruitment cost of rank-and-file employees from $1,000 to $1,459.

(d) MOW Training and Recruiting

On Reply, BNSF included $1,354,151 for the training and recruitment of maintenance-of-way employees. BNSF's calculations are frequently undocumented and/or illogical. For example, BNSF applied a $19,340 recruiting cost to each employee in the General Office as well as to Supervisors in the field. Presumably this reflects the cost of recruiting management level employees, but this figure is completely undocumented and must therefore be rejected. Furthermore, the $19,340 is illogically applied to each employee in the General Office, whether management level or not, so that the estimated cost of recruiting both a clerk and a senior manager is $19,340.

For all other employees, BNSF assumed that the cost of recruiting would be $1,459 per employee. As discussed previously, WFA/Basin disagree with the use of $1,459 for recruiting rank-and-file employees. In addition, BNSF assumed that all non-management employees would go through a training program that would cost $5,000 plus two weeks of full salary for each employee. In contrast, WFA/Basin assumed two weeks of training for maintenance supervisors and one week for track gangs, with a training cost of $5,000 per employee. WFA/Basin also assumed employees would receive 80% salary while in training. BNSF did not provide any justification for increasing the non-management training program to two weeks. Nor did it explain why a one-week program for track gangs is infeasible, or why employees would receive 100 percent of their annual salary while in training.

Finally, BNSF 's training and recruitment spreadsheets reflect an additional $70 cost per employee that is completely unexplained. BNSF has failed to provide any explanation of what this cost is for, so it must be excluded.

(e) <u>Preemployment Testing</u>

BNSF included $100 per employee for pre-employment testing, based upon Mr. McCarren's experience at WCS. However, to the extent that pre-employment testing is required, it is already included as a component of the recruiting costs discussed previously. There is no reason for a separate, additional charge.

(f) Investment Fees

Finally, BNSF contends that the LRR must pay a 4% fee to investment bankers for financing the initial construction of the LRR. See BNSF Reply at III.D-145. BNSF's evidence on this issue is virtually identical to the evidence BNSF submitted (through the same witness, Mr. McCarren) in the AEP Texas case.

The Board has rejected similar BNSF proposals for an equity flotation fee due to a lack of supporting evidence in several recent rate cases. See Xcel I at 76 and TMPA I at 162; see also WPL I at 107. Notably, the BNSF evidence that the Board deemed insufficient in Xcel I (a verified statement from the President and Chief Executive Officer of Anacostia & Pacific, a private consulting firm), has been reduced in BNSF's Reply evidence in this proceeding to a mere reference to a conversation between Mr. McCarren and this same executive (and the citation of a Wall Street Journal article). This evidence does not rise to the minimum level that the Board identified in the Xcel I decision; namely, "evidence of the existence and size of equity flotation fees associated with equity issuances of a similar size . . . ." Id. at 76.

4. Maintenance-of-Way

a. Overview

The SARR maintenance-of-way ("MOW") plans proposed by complainants in prior SAC cases have largely been rejected by the Board because they were inadequately supported, provided inadequate in-house maintenance personnel compared with real-world railroads, and relied too heavily on out-sourcing. See, e.g., Xcel I at 77-80. Because the Board was unable to accept the complainants' MOW plans, it instead accepted the MOW plans proposed by the defendant railroads. Id.

The situation is different in this case. The LRR's MOW plan was carefully designed, explained and supported by WFA/Basin's highly experienced team of expert MOW witnesses. These witnesses include:

- Michael Kenyon, an engineering graduate of MIT who has many years of both field and staff experience in maintaining heavy-haul rail lines operated by the former DRGW/SP including service as Division Engineer, Regional Engineer and Assistant Chief Engineer.
- Alan Blackwell, a former Manager Track Maintenance and track Inspector responsible for UP's high-density coal lines emanating out of the PRB.
- Richard McDonald, who was responsible for all aspects of the WRPI construction project in the early 1980's and for maintaining and operating WRPI's lines for a number of years after WRPI commenced service in 1984.
- Gary Myers, who served as Chief Regional Engineer at Conrail and as Division Engineer at Conrail and NS, and who was directly responsible for maintenance of heavy-haul coal lines.

- Paul Reistrup, who, in addition to his high-level executive and operating positions at various railroads including CSXT and Amtrak, held several field engineering/MOW positions for the Baltimore & Ohio Railroad (one of CSXT's predecessors) in B&O's high-density coal territory in West Virginia and Pennsylvania.

Collectively, these experts are more qualified to develop a maintenance-of-way plan for a coal SARR than BNSF's MOW witness, Gerald Albin, whose entire railroad engineering career was spent at BNSF and who, as shown below, relies entirely on the unionized BNSF's real-world experience in discussing the LRR's MOW plan.

The MOW plan developed by WFA/Basin's expert team took into account the fact that the necessary funds to replace all of the LRR's assets at the end of their lives are accounted for in the DCF model – thereby obviating the need to provide MOW funds for program maintenance to systematically replace worn-out assets. Their MOW plan reflects a ground-up approach to developing the LRR's MOW needs, with a focus on the personnel and equipment needed to perform the day-to-day maintenance work that is treated as operating expense. The MOW plan also includes a detailed description of all contracted maintenance work including work that is capitalized and some work that is treated as operating expense. See WFA/Basin Op. Narr. at III-D-71 to 129.[50]

Recognizing the specialized nature of many MOW tasks, WFA/Basin's MOW experts limited the use of cross-trained employees to the performance of simple

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[50] BNSF has acknowledged the propriety of WFA/Basin's experts' focus on the LRR's in-house MOW workforce, and that this focus represents a departure from the approach used by complainants in prior SAC cases. See BNSF Reply Narr. at III.D-122.

functions such as driving a truck and operating power tools. Id. at III-D-80. Their field and general office MOW staffing for the LRR was also shown to be consistent with the staffing used by real-world railroads, including UP and WRPI. Id. at III-D-77 to 78, 82 to 83, and 89 to 93.

Although WFA/Basin's MOW experts have provided for contractors to perform all program maintenance and some maintenance work that is assigned to operating expense, they have by no means outsourced the MOW function – nor have they provided the kind of skeletal in-house MOW staffing that the Board rejected in Xcel I at 79. This is evidenced by the following comparison of the LRR's MOW staffing as proposed by WFA/Basin on Rebuttal with the MOW staffing proposed by the complainant in Xcel (see Xcel I at 79):

Rebuttal Table III-D-5
MOW Staffing Comparison - Xcel v. WFA/Basin

Complainant	SARR Route Miles	MOW Managers	MOW Field Forces
Xcel	396	8	55
WFA/Basin	218	14	82

In addition, unlike prior rate cases (including Xcel), BNSF has accepted the basic elements of the LRR MOW plan developed by WFA/Basin's MOW experts. The key element of any railroad MOW plan is field track maintenance. WFA/Basin's experts provided for two Field Maintenance Supervisors (equivalent to Roadmasters on some railroads), to be based at Guernsey and Donkey Creek. BNSF accepted this field supervisory staffing (and actually proposed to eliminate two Assistant Field Maintenance Supervisors provided by WFA/Basin).[51] WFA/Basin's experts also divided the LRR route into five field track-maintenance districts, with each district staffed by a track-maintenance crew consisting of a foreman and three track workers. BNSF accepted both the field maintenance districts and the track-maintenance crew size.[52]

BNSF has also accepted the Engineering/MOW general office staffing proposed by WFA/Basin's experts, except that BNSF proposes to move three inspectors (the Signals and Communications Test Inspector and two B&B Inspectors) from the general office to the field.[53] WFA/Basin's experts accept this change, so the parties are in complete agreement with respect to the managerial staffing for the MOW function.

Notwithstanding BNSF's acceptance of key elements of WFA/Basin's MOW plan, large differences between the parties remain in terms of overall field staffing and total annual MOW operating expense. The differences relate to the in-house staffing

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[51] See WFA/Basin Op. Narr. at III-D-75 to 76 and BNSF Reply Narr. at III.D-157.

[52] See WFA/Basin Op. Narr. at III-D-76 and 79-80 and BNSF Reply Narr. at III.D-157.

[53] See WFA/Basin Op. Narr. at III-D-93 to 100 and BNSF Reply Narr. at III.D-152 to 153.

needed to perform various specialized MOW functions such as track and bridge inspection, welding, surfacing, and signals and communications maintenance.[54]

To buttress its position that the LRR's field MOW staff should be enlarged, BNSF devotes the first 29 pages of its Reply Narrative on MOW issues (beginning at page III.D-122) to general criticisms of WFA/Basin's MOW plan. BNSF's principal theme is that WFA/Basin's plan is out-of-line with BNSF's own real-world experience in maintaining the heavy-haul coal lines replicated by the LRR, including, in particular, the "Joint Line" portion of the Orin Subdivision which represents half of the LRR's total route mileage. See, e.g., BNSF Reply Narr. at III.D-122 to 125. In essence, this portion of BNSF's reply evidence attempts to convince the Board that any MOW plan for the LRR that does not replicate BNSF's own maintenance standards and practices for its PRB coal lines is by definition inadequate.

BNSF's heavy reliance on its own MOW standards and practices in critiquing WFA/Basin's MOW plan for the LRR, and in designing its own substitute plan, is misplaced for four principal reasons.

First, BNSF's maintenance practices are the product of its own experience with the Joint Line, which was poorly constructed and has for many years required the devotion of extra maintenance personnel and equipment in order to address frequent

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[54] WFA/Basin's MOW experts provided specialized field personnel to perform these functions, and described their duties in considerable detail. See WFA/Basin Op. Narrative at III-D-83 to 89.

outages and emergencies resulting from the original defective embankment. The LRR is being designed and constructed using modern techniques, and its subgrade and track structure will not suffer from the flaws that have affected Joint Line maintenance over a period of 25 years. This lessens the need for the kind of excessive field maintenance forces that now appear natural to BNSF's only MOW witness, Gerald Albin. Mr. Albin was involved in the construction of the original Joint Line in the late 1970's, and was responsible for its overall maintenance for an eight-year period beginning in 1988.[55]

Second, BNSF's present maintenance practices for heavy-haul coal lines are designed primarily for the Joint Line, which BNSF is responsible for maintaining under its joint facility agreement with UP. The Joint Line carries a huge volume of coal traffic. In fact, in both 2003 and 2004 the Joint Line carried more than double the total volume of coal traffic that the LRR will transport in its peak year (2020). This traffic includes UP-originated coal as well as BNSF-originated coal, and for several years UP has originated more than half of the coal transported on the Joint Line. See Rebuttal Table III-F-2 on page III-F-4 below. BNSF's MOW evidence and comparisons reflect the total volume of traffic moving over the Joint Line. It is inappropriate to compare the maintenance requirements of the Joint Line with the maintenance requirements of the LRR which carries a fraction of the total coal traffic that moves over the Joint Line.

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[55] See BNSF Reply Narr. at III.D-121.

This is especially true given BNSF's historical tendency to throw personnel and equipment at the Joint Line to overcome its basic design and construction flaws. Those flaws are described in detail in WFA/Basin Rebuttal Exhibit III-D-1, which was prepared by WFA/Basin Witness Richard McDonald. Mr. McDonald was responsible for the construction, operation and maintenance of WRPI from its inception, as well as for WRPI's operations on the Joint Line commencing in 1984. Mr. McDonald is very familiar with the original Joint Line, and he is also well-acquainted with what BNSF did to overcome various flaws in its design and construction, because he was responsible for approving the bills BNSF submitted to WRPI for its share of the cost of maintaining the Joint Line. Mr. McDonald's Exhibit III-D-1 provides needed perspective on BNSF's approach to the LRR's maintenance needs and why Mr. Albin's proposed substitute MOW plan for the LRR is overkill.

Third, BNSF's maintenance practices on heavy-haul coal lines reflect the fact that BNSF presently has concrete ties on most of the lines being replicated by the LRR. BNSF also proposes to use concrete ties for the LRR, and its MOW plan and field staffing for the LRR reflect the special maintenance needs of track with concrete ties.[56] WFA/Basin's MOW plan reflects maintenance needs for track with wood ties. As

[56] For example, track with concrete ties is more rigid than track with wood ties, and requires more frequent surfacing and grinding. If a derailment occurs on track with concrete ties, track integrity, gauge and destruction are usually affected over a larger area than with wood ties (BNSF admits this as the reason for having more dragging equipment detectors for track with concrete ties versus track with wood ties).

demonstrated in Part III-F-3-c below, it is unnecessary to construct the LRR with concrete ties and there is no need to account for the additional maintenance associated with the use of these ties.

Fourth, BNSF is a unionized railroad, and its MOW forces are subject to rigid craft rules. BNSF's field MOW employees are members of several different unions, including the Brotherhood of Maintenance of Way Employees ("BMWE"), the Brotherhood of Railroad Signalmen ("BRS"), The Transportation Communications International Union ("TCU"), and the International Brotherhood of Electrical Workers ("IBEW"). The division of MOW work along rigid craft lines results in many inefficient practices that can be avoided by the non-union LRR (for example, this is why BNSF uses different employees to maintain signals and to maintain communications facilities). BNSF Witness Albin's discussion of the LRR's MOW plan reflects a "craft mentality" resulting from his many years of experience working with unionized MOW forces.

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One additional matter discussed in the introductory section of BNSF's reply MOW evidence warrants a brief comment here. WFA/Basin's opening evidence compared the LRR's field maintenance forces with those of UP and WRPI to demonstrate their feasibility. See WFA/Basin Op. Narrative at III-D-77 to 78, 82 to 83 and 89 to 93. BNSF mistakenly denigrates both comparisons.

With respect to UP, WFA/Basin's Witness Alan Blackwell, who served as a Track Inspector and Manager Track Maintenance on UP's high-density PRB coal route, showed that the LRR's field track-maintenance supervisory and basic track-crew staffing are conservative compared with UP's track crews on its lines emanating from the PRB. Id. at III-D-77 to 78 and 82 to 83. BNSF asserts that Mr. Blackwell's UP comparison involves only basic track section crews, and does not reflect all UP field employees involved in track maintenance. BNSF Reply Narr. at III.D-125 to 126.[57] This is true, but the comparison is nonetheless valid in terms of the basic track-maintenance personnel needed for heavy-haul coal lines. In any event, Mr. Blackwell notes that BNSF has accepted WFA/Basin's LRR track section crew assumptions. Id. at 126.

With respect to WRPI, WFA/Basin Witness McDonald demonstrated that the LRR's total field MOW staffing is comparable to WRPI's field staffing ten years after it commenced operations in the PRB. See WFA/Basin Op. Narr. at III-D-89 to 93. BNSF argues that Mr. McDonald's comparison is "not credible" because of the large territory

[57] Mr. Blackwell notes that UP's Reply electronic workpaper "UP Workforce Comparison.pdf" does not accurately represent UP's field MOW forces on its South Morrill Subdivision. First, this subdivision covers more than the 120 miles assumed by Mr. Albin; it extends 165 miles from O'Fallons to South Morrill, NE. Second, the 31 field MOW employees cited by Mr. Albin include two extra gangs (#4844-track and #5095-machine operators) with six employees that are assigned to a different UP cost center (EC673) and are not part of the permanent field forces assigned to this subdivision. Thus the more accurate measure is 25 total field MOW employees for 165 route miles (all double track). However, even the 31 field employees cited by Mr. Albin equate to 5.3 route miles per employee. By comparison, the LRR has 54 field track MOW employees (as revised on Rebuttal) for 218 route miles, or only 4.0 route miles per employee.

(87 route miles carrying over 86 million tons of coal traffic) that was purportedly assigned to a single track or section crew based at Lusk, WY. BNSF Reply Narr. at III.D-126 to 128. Mr. McDonald confirms that his WRPI comparison is accurate, but notes that, in, fact two section crews were headquartered at Lusk by its tenth year of operations, not one as BNSF suggests. Mr. McDonald addresses BNSF's comments on WRPI in more detail in Rebuttal Exhibit III-D-1.

b. <u>LRR MOW Personnel Requirements</u>

BNSF finally turns to the specifics of the LRR's MOW personnel requirements on page III.D-152, or 30 pages into the section of its Reply Narrative on MOW. BNSF begins by accepting WFA/Basin's proposed managerial staffing for the engineering/MOW function, except that it suggests shifting three inspector positions from the general office to the field. BNSF Reply Narr. at III.D-152 to 153. These positions are shown in the table on page III-D-95 of WFA/Basin's Opening Narrative, and include one Signal/Communications Test Inspector and two Bridge & Building Inspectors. WFA/Basin accepts BNSF's proposal to move these employees from the general office to the field forces. This does not affect the LRR's overall MOW personnel requirements or its annual operating expense.

With respect to field MOW personnel, WFA/Basin's MOW plan for the LRR, as presented in their opening evidence, reflected a total of 71 field MOW employees. <u>See</u> WFA/Basin Op. Narr. at III-D-89. On Rebuttal, WFA/Basin's MOW experts have increased the field MOW staff by 11 employees, bringing the total to 82. The additional employees reflect the shift of three inspector positions from the general office to the field, as discussed above. They also reflect the addition of eight employees: one three-person System Track Crew, one Signal/Communications Supervisor, two Signal/Communications Technicians, one Electrical Technician, and one Machine Operator-Purchasing/Stores.

BNSF proposes to increase the field MOW force to a total of 120 employees. In this regard, Table III.D.4 on page III.D-154 of BNSF's Reply Narrative shows a total of 121 field MOW employees. However, when the numbers in BNSF's separate tables for each field MOW sub-department (Track, B&B, Signals, Communications, Electrical and Purchasing/stores) are added up, the total is 120 employees, not 121. This count includes 10 seasonal track workers.

A comparison of the parties' proposed MOW field personnel is set forth in Rebuttal Table III-D-6 below. This table reflects WFA/Basin's Rebuttal additions.

Rebuttal Table III-D-6 LRR Field Maintenance Personnel Comparison			
Classification/Position	**WFA/Basin**	**BNSF**	**Difference**
Track	**54 total**	**61 total**	**7**
Field Maintenance Supervisors	2	2	0
Asst. Field Maintenance Supervisors	2	0	(2)
Track Inspectors	4	8	4
Track Maintenance Crew Members	20	20	0
Night Response Crew Members	0	5	5
District/System Gang (Crew) Members	3	6	3
Spot Surfacing Crew Members	4	0	(4)
Ditching Crew Members	2	0	(2)
Seasonal Track Gang Members[1/]	0	10	10
Welding/Grinding Crew Members	6	8	2
Lubricator Technicians	2	0	(2)
Machine Operators/Truck Drivers[1/]	7	0	(7)
Work Equipment Mechanics	2	2	0
Bridge & Building (B&B)	**3 total**	**7 total**	**4**
Bridge Inspectors	2	1	(1)
B&B Foreman	0	1	1
Carpenter/Helpers	0	3	3
Machine Operator/Truck Driver	0	1	1
Water Plant/Fueling Systems Technician	1	1	0
Signals and Communications	**23 total**	**47 total**	**24**
Signal/Communications Supervisor	2	0	(0)
Signal/Communications Test Inspector	1	0	(1)
Signal/Communications Maintainers	18	0	(18)
Signal/Communications Technicians	2	0	(2)
Signal Supervisors	0	3	3

Signal Inspector	0	1	1
Signal Foremen	0	2	2
Signal Maintainers	0	24	24
Dispatch Center Technicians	0	5	5
Signal Technician	0	1	1
Communications Supervisor	0	1	1
Foreman	0	1	1
Communications Maintainers	0	2	2
Communications Technicians	0	2	2
Microwave Technicians	0	3	3
Radio Shop Technicians	0	2	2
Electrical	**1 total**	**2 total**	**1**
Foreman	0	1	1
Journeyman Electrician/Electrical Tech.	1	1	0
Purchasing/Stores	**1 total**	**3 total**	**2**
MOW Purchasing Manager	0	1	1
Machine Operator/Truck Driver	1	0	(1)
Machine Operator (forklift)	0	1	1
Truck Driver	0	1	1
Total field MOW employees	**82**	**120**	**38**

[1/] Although it is not entirely clear from BNSF's evidence, it appears that BNSF's 10 Seasonal Track Gang Members are the same employees as its 10 Machine Operators/Truck Drivers. These employees are referred to as "part of the section crews and the 10-man seasonal gangs" at BNSF Reply Narr. III.D-158. However, BNSF's Reply Exhibit III.D.4-1, page 2 (which is also Tab "Personnel" in BNSF Reply electronic workpaper "III.D-4 Maintenance of Way.xls") lists the 10 Machine Operators as seasonal employees only, paid for 9 months of the year. Accordingly, WFA/Basin has listed these employees as Seasonal Track Gang Members.

i. Track Maintenance Personnel

Supervisors. WFA/Basin provided a total of four field supervisors for the track-maintenance function, including two Field Maintenance Supervisors and two Assistant Field Maintenance Supervisors. The Field Maintenance Supervisors are based at Guernsey and Donkey Creek; the Assistant Supervisors are based at Reno and South Logan. BNSF agrees with the two Field Maintenance Supervisors (and their locations) but has eliminated the Assistant Supervisors. BNSF Reply Narr. at III.D-156 and 157.

WFA/Basin's MOW experts disagree with the elimination of the Assistant Field Maintenance Supervisors for three reasons. First, the Assistants provide increased supervisory coverage, which helps to increase the productivity of the work force. Second, the Assistants alternate weekend coverage so that the Field Maintenance Supervisors are not on call continuously. Third, the Assistants also perform track inspections themselves, thus supplementing the track inspection effort.

Track Inspectors. Not withstanding the LRR's relatively small size (218 route miles), WFA/Basin's MOW experts provided four Track Inspectors due to the railroad's heavy tonnage and high proportion of double track. The Track Inspectors are based at Donkey Creek, South Logan, Bridger Jct. and Guernsey, thus enabling each of them to cover different territories efficiently. See WFA/Basin Op. Narr. at III-D-84 to 85. BNSF does not disagree with the coverage provided by WFA/Basin's track inspectors, but provides for two-person inspection teams rather single inspectors, thus doubling the number of personnel required from four to eight. See BNSF's Reply Workpapers Vol. I, p. BNSF.RP.WP III.D-4-043.

BNSF has provided no evidence indicating why two-person track inspection crews are needed. The experience of WFA/Basin's MOW experts is that one-person inspection patrols are just as effective as two-person patrols. WRPI and CNW used one-person patrols to conduct track inspections. So did DRGW/SP. When WFA/Witness Kenyon supervised track inspection personnel as a Roadmaster and Division Engineer for DRGW/SP, one-person inspection patrols were used on all lines, including double-track main lines that carried heavy traffic volumes including coal. Earlier in his DRGW career, Mr. Kenyon personally conducted track inspections as a one-man patrol on these lines, first by track motor car and later hi-rail vehicle. In Mr. Kenyon's experience, a single qualified track inspector is fully capable of detecting defects, providing emergency protection to trains if necessary, and properly reporting defects for later correction.

As noted above, track inspections will also be performed by the LRR's two Assistant Field Maintenance Supervisors. This additional inspection coverage would be removed under BNSF's proposal to eliminate the Assistant Field Maintenance Supervisors.

Track (Section) Crews and Night Crew. BNSF twice states that it agrees with WFA/Basin's provision for five four-person track or section crews. See BNSF Reply Narr. at III.D-126 and 157. However, BNSF Witness Albin proposes to supplement the five section crews with a "night response" crew, also consisting of four persons. He justifies this additional crew by stating that the LRR is a 24/7 operation and outages can occur any time, day or night, and that "[a] night response crew is necessary to respond to nighttime maintenance needs." BNSF Reply Narr. at III.D-154 to 155. In a further effort to justify this crew, Mr. Albin states that the crew can also perform preventive maintenance on turnouts because the LRR's lines are less congested at night, thus implying that the work time will be more productive. Id. at 155.

Taking the last point first, the LRR is a non-scheduled railroad serving mines, interchange points and a power plant that operate 24 hours a day. The mines load trains as they arrive, and train movements occur randomly at any hour of the day or night. There is no evidence that train movements at night are less frequent than during daytime hours, so the notion that a maintenance crew could be more productive at night due to less frequent train movements is sheer speculation.

In fact, WFA/Basin's MOW experts note that performing track work at night is much less productive than performing it during the day. In their experience, work done at night – even surfacing track with laser beam tampers and good lighting – is less than half as productive on any basis of measurement than work done in the daytime. Work on turnouts, with all of their small parts and connecting rods, would be especially difficult at night.

Although WFA/Basin's MOW experts believe it is unnecessary and inappropriate to assign a track crew specifically for night work, they have concluded that weekend coverage should be strengthened and have provided an additional three-person System Track Crew for that purpose. This crew is available for work anywhere on the LRR system, including nights, and is discussed further below.

District Gangs/Spot Surfacing and Ditching Crews. On Opening, WFA/Basin provided for a total of three crews to handle spot surfacing (two crews) and ditching (one crew) on a system basis. These crews include equipment operators, who are listed separately as Machine Operators in Rebuttal Table III-D-6 above. See WFA/Basin Op. Narr. at III-D-87 to 88.

BNSF proposes to replace these crews with two three-person District Gangs, one headquartered at Guernsey and one headquartered at Donkey Creek. See BNSF Reply Narr. at III.D-156 and 157. According to BNSF Witness Albin, these District Gangs would be on call 24/7 and would "respond to major derailments, washouts, and other larger track problems and priority maintenance projects that track section crews are not capable of handling, such as surfacing and drainage work." Id. at III.D-157.

Much of the work that Mr. Albin proposes for the District Gangs would be performed by the Spot Surfacing Crews and Ditching Crew proposed by WFA/Basin's MOW experts (both proposals entail a total of six employees). Mr. Albin's entire explanation of why he eliminated the Spot Surfacing and Ditching crews is that they "would not be efficiently used on LRR" and the work they would perform "can be performed more efficiently by district gangs and by seasonal workers." Id. at III.D-155.[58] However, the issue is not whether the different field track staffing proposed by BNSF would be able to perform the necessary tasks, but whether WFA/Basin's proposed track staffing would be able to do so. BNSF has not shown that WFA's proposed staffing is infeasible.

In any event, WFA/Basin's MOW experts acknowledge the need for some additional weekend and emergency coverage for random track outages. Therefore, WFA/Basin's experts have concluded that the spot-surfacing and ditching crews they originally provided should be retained, and that one three-person System Track Crew should be added to the LRR's field track forces. This crew, which would be based at South Logan, would work four days a week including weekends to strengthen seven-day coverage of field track maintenance.

Seasonal Track Gang Members. Under WFA/Basin's MOW plan, all field MOW employees are permanent employees – there are no seasonal track workers. BNSF proposes to add 10 seasonal track workers who would be available nine months of the

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[58] WFA/Basin's MOW experts note that Mr. Albin's testimony is inconsistent on the "efficiency" issue. On the one hand Mr. Albin disparages WFA/Basin's use of cross-trained employees and asserts that "use of specialized forces is the most efficient approach on a heavy-haul, high-tonnage railroad" (id. at III.D-155), but on the other hand he proposes to eliminate three specialized crews in favor of two more generalized section-type crews. Mr. Albin cannot have it both ways.

year.[59] These seasonal employees would be available to perform work such as ditching, spot surfacing and improving drainage. See BNSF Reply Narr. at III.D-153 and 155-56. Under WFA/Basin's MOW plan this kind of work would be performed by the LRR's permanent track forces, including the spot-surfacing and ditching crews, as well as the System Track Crew that WFA/Basin's experts have added to the field track forces on Rebuttal. WFA/Basin's MOW experts also note that while some work is best performed in good weather, broken rails and other track outages are not limited to the good weather months but can occur at any time.

Mr. Albin's proposal for a seasonal track gang appears to be based primarily on the fact that the real-world BNSF employs seasonal gangs. However, Mr. Albin has provided no evidence that a railroad such as the LRR must employ seasonal gangs, or that a SARR MOW plan that does not include seasonal gangs is infeasible for that reason. BNSF uses seasonal gangs, in part, because it is able to shift them around to do "blitz" work on big-ticket projects such as triple-tracking the Joint Line. The LRR does not need to engage in such projects, because it has sunk its peak-year capacity in the ground before Year 1 of its operations. There is more than one way to skin a cat, and in

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[59] As noted earlier, BNSF's evidence is ambiguous as to exactly who the 10 seasonal workers are. BNSF describes them as performing general track-related projects (including improving drainage and spot tamping, which is work that would be performed by the LRR's permanent spot-surfacing and ditching crews). BNSF Reply Narr. at III.D-159. However, BNSF's MOW exhibit and spreadsheets lists these employees as Equipment Operators – and BNSF does not otherwise provide for equipment operators in describing the LRR's field track forces.

the judgement of WFA/Basin's MOW experts, their track-maintenance plan for the LRR is not only feasible, but superior to BNSF's plan due to the latter's greater reliance on seasonal workers and section-crew type employees.

Welder/Grinder Crews. WFA/Basin's MOW plan includes three two-person welding crews, with the crews based at Donkey Creek, South Logan and Guernsey. See WFA/Basin Op. Narr. at III-D-86 to 87. BNSF Witness Albin proposes to add a fourth two-person crew, and to change the crew bases to Donkey Creek, Reno, Bridger Jct. and Guernsey. See BNSF Reply Narr. at III.D-156 and 157-58.

Mr. Albin's addition of a fourth welding crew is based on a description of the work to be performed by these crews, and what he describes as "BNSF production rates" and "the size, tonnage and speed of LRR." Id. at III.D-158. However, Mr. Albin does not explain what he means by "BNSF production rates," and the other factors were also considered by WFA/Basin's MOW experts. In other words, Mr. Albin's proposal is based on nothing but opinion testimony.

Mr. Albin has provided nothing to convince WFA/Basin's MOW experts that three welding crews are insufficient. Three crews are sufficient because of the LRR's small size and limited yard trackage, its pro-active policy of rail replacement, and the use of wood ties which provides less rigidity in the track structure than concrete ties and reduces the need for frequent welding of rail and turnout components.

Machine Operators/Truck Drivers. WFA/Basin's MOW experts provided seven Machine Operators, who will operate various pieces of MOW equipment including tampers, ballast regulators, speed swings, and the LRR's Gradall. They accompany the section crews and other specialized track crews on an as-needed basis. See WFA/Basin Op. Narr. at III-D-89 and the preceding descriptions of the specialized crews. BNSF describes essentially the same equipment, but appears to add three Machine Operator/Truck Drivers to the seven provided by WFA/Basin, for a total of 10. See BNSF Reply Narr. at III.D-158.[60]

BNSF describes the need for 10 employees using the same vague, non-specific rationale it uses for the additional welding crews ("Based on BNSF production rates, and the size, tonnage and speed of LRR. . ."). As best WFA/Basin's MOW experts can discern, BNSF appears to base its proposal to add three additional employees on two factors: (1) its plan to equip each of the five section crews with a speed swing, as opposed to the two system speed swings that WFA/Basin's experts provided, and/or (2) the alleged need for separate truck drivers to operate larger over-the-road equipment. Neither of these factors warrants an increase in the seven Equipment Operators provided by WFA/Basin.

[60] Once again, BNSF does not list the Machine Operators/Truck Drivers in its tables showing the LRR's track and other field maintenance employees, but rather shows them as constituting the 10 seasonal workers. This inconsistency in BNSF's evidence alone requires the rejection of BNSF's proposal to add three employees in this category.

WFA/Basin demonstrate below in the MOW Equipment section that the LRR does not need three additional speed swings. Each of the five track-maintenance or section crews is equipped with a boom truck, which is capable of lifting rail and ties, so there is no need for each crew to also have a speed swing. Nor is there any reason why separate employees are required to drive the LRR's larger over-the-road equipment. This proposal appears to be a product of Mr. Albin's experience with unionized railroad MOW forces, involving work rules that require a high degree of division of labor. The LRR's seven Equipment Operators (not to mention the foremen of the various track crews) can obtain the necessary DOT and CDL licenses, and the training/testing required to maintain these licenses is not time-consuming and would not interfere with the performance of their regular duties.

Work Equipment Mechanics. Both parties agree that the LRR needs two work equipment mechanics, and that major repairs and overhauls would be performed by a third party. See BNSF Reply Narr. at III.D-158 to 159.

ii. **Bridge and Building Maintenance Personnel**

WFA/Basin's MOW plan essentially combines the Track and B&B groups together for purposes of inspections and routine, day-to-day bridge/building repairs. Its MOW experts provided for bridge and culvert inspections both by the five track-maintenance or section crews and by two specialized Bridge & Building Inspectors (the latter were included as part of the general office Engineering/MOW staff). See

WFA/Basin Op. Narr. at III-D-80 and 99-100. The only B&B employee specifically assigned to the field forces was a Water Plant & Fueling System Technician based at Guernsey. Id. at III-D-88 to 89 and 95. (This individual reports to the Manager of Mechanical Operations in the headquarters Engineering/Mechanical staff.)

BNSF proposes to shift the two Bridge and Building Inspectors to the field, rather than including them as general office staff – a proposal WFA/Basin accept. BNSF also agrees with the need for a B&B employee to cover the water and other systems at Guernsey, although BNSF calls this employee a "Water Service Mechanic" rather than a "Water Plant & Fueling System Technician". See BNSF Reply Narr. at III.D-163. However, BNSF proposes a total B&B field staff of seven employees, compared to WFA/Basin's field B&B staff of three employees including the two B&B Inspectors.[61]

BNSF's proposed B&B field staffing includes one Bridge Inspector, the Water Service Mechanic discussed above, and a five-person B&B maintenance crew consisting of a Foreman, three Carpenter/Helpers, and one Machine Operator/Truck Driver. Id. at III.D-161 to 163. BNSF would have the specialized B&B maintenance crew perform routine bridge maintenance of the kind WFA/Basin's track-maintenance (section) crews and ditching crew perform: tightening bridge bolts, adjusting bridge ties, inspection and maintenance of large culverts, cleaning bridge spans, etc.

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[61] Both parties include a B&B supervisor in the general office Engineering/MOW staff, although BNSF appears to call this employee a "Supervisor of Bridges and Buildings" (id. at III.D-161) whereas WFA/Basin call him or her a "Bridge Engineer."

Bridge Inspections. BNSF proposes to reduce the number of specialized B&B Inspectors from two (as proposed by WFA/Basin) to one. This is inconsistent with BNSF's criticism of WFA/Basin's proposal to conduct major bridge inspections every five years and its statement that thorough bridge inspections have to be performed every year (id. at III.D-159 n.206). In this regard, BNSF has misinterpreted WFA/Basin's proposed bridge inspection intervals. The inspections that would be performed every five years are major bridge inspections performed by professional outside contractors. This level of inspection includes such items as underwater checking of support piers and detailed inspection of concrete and steel members.

WFA/Basin's MOW experts agree that regular, thorough inspections should be performed at least once per year so that required maintenance can be planned and scheduled rather than becoming a sudden urgent need. This is why WFA/Basin's experts have staffed two B&B Inspectors rather than only one, as BNSF proposes. These employees conduct more thorough bridge inspections than the visual inspections performed by the field track crews, and they do so more often than once per year.

Bridge Maintenance. BNSF has not explained why the kind of routine, minor bridge maintenance that it assigns to a separate B&B maintenance crew could not be performed by the field track forces. In fact, BNSF acknowledges that coordination between bridge maintenance crews and the track sub-department "is essential as many required tasks, such as raising bridge ends, aligning track on bridges, and ballast deck maintenance, require the expertise and involvement of both departments." Id. at III.D-162. Although the real-world BNSF may have separate bridge-maintenance crews, the LRR has no need for a separate B&B crew since all major repairs (which would be infrequent as the LRR starts out with brand-new bridges) would be contracted out.

Unlike the real-world BNSF, the LRR is constructed entirely with steel and concrete bridges and has no wood pile bridges. BNSF's Orin and Campbell Subdivisions have steel and concrete bridges, but the Canyon, Front Range, and Black Hills Subdivisions (all of which carry large volumes of PRB coal traffic) have mostly older bridges. Some of these bridges have ballasted decks with wood piles. Wood pile bridges require more frequent maintenance than steel and concrete bridges, including frequent vertical adjustment by shimming or replacement. The extra maintenance needs of these wood pile bridges undoubtedly influenced BNSF Witness Albin's decision to add a separate small B&B maintenance crew to the LRR's field forces.[62]

WFA/Basin Witness Kenyon notes that during his tenure at DRGW/SP a number of steel and concrete bridges were constructed, including large structures more than 300 feet in length over waterways such as the Colorado and Yampa Rivers in Colorado. Only one of these bridges, a short structure over Williams Fork Creek southwest of Craig, CO, required any significant maintenance during the first 25 years of its existence (a steel pile failed due to fracturing of the rock layer and required routine

[62] Even the title of one of the B&B employees categories Mr. Albin proposes to add, "Carpenter/Helper," is a throwback to the era of wood pile bridges and trestles.

repair of the bent support). In the unlikely event that an emergency bridge failure occurs, the LRR's field forces would immediately be supplemented by an outside bridge contractor. In short, based on his experience, Mr. Kenyon concludes that a separate B&B maintenance crew for a railroad the size of the LRR is unjustified.

iii. Signals and Communications Maintenance Personnel

WFA/Basin's MOW plan provides for a combined Signal and Communications sub-department. As proposed on Opening, the field portion of this sub-department was staffed by one Signal/Communications Supervisor, a Signal/ Communications Test Engineer (who has been moved from the general office to the field), and 18 Signal/Communications Maintainers, five of whom are responsible for maintaining the central dispatch center and related CTC equipment at the Guernsey headquarters on a 24/7 basis. See WFA/Basin Op. Narr. at III-D-85 to 86 and 98 to 99. As explained below, WFA/Basin's MOW experts have added a second Signal/ Communications Supervisor and two Signal/Communications Technicians on Rebuttal.

BNSF Witness Albin proposes to divide the signal function and the communications function into two separate sub-departments at the field level.[63] He also proposes to increase the total staffing for these separate field sub-departments to a total of

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[63] WFA/Basin's MOW experts note that Mr. Albin has accepted their general office Engineering/MOW staffing, in which the combined signals and communications functions are headed by a Signals & Communications Engineer. BNSF Reply Narr. at III.D-152 to 153. The general office staff includes two Assistant Engineers, one primarily responsible for signal maintenance and one primarily responsible for communications maintenance. This ensures adequate attention to each function at the staff level.

47 employees (compared with the 20 total employees originally provided by WFA/Basin), of whom 36 (including three field Signal Supervisors) would maintain the LRR's signal system and 11 would maintain the communications system. Id. at III.D-163 to 169.

Mr. Albin claims that combining the field signals and communications maintenance personnel into a single group of Signal/Communications Maintainers is unrealistic. Mr. Albin's entire argument for separating these employees into separate sub-departments is contained in the following passage (id. at III.D-135):

> The skills and training required to maintain, inspect and test signals are substantially different in many respects than those needed to maintain, inspect, and test the communications system. The communications systems on a modern railroad are technologically sophisticated, complex systems that include radios, network data systems and microwave systems. Communications maintainers must be specially trained and have expertise in the systems they maintain. WFA/Basin's assumption that signal maintainers can also perform maintenance on communications systems on LRR is not realistic.[181]

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[181] While WFA/Basin claim that WRPI supports the use of combined signal/communications here, too little is known about WRPI to make a meaningful comparison to LRR. Mr. McDonald provides no information regarding the number of signal units on WRPI or the role of CNW in maintaining the communications system. Indeed Messrs. Albin and Mueller recall that initially, WRPI had a very basic, minimal signal system. However, without information regarding WRPI's signals and communications systems and critical data, it cannot be assumed that was appropriate for WRPI's unique circumstances would be appropriate for a stand-alone railroad line LRR.

This testimony is noteworthy for its lack of any supporting documentation or other specific evidence. Mr. Albin's statement of qualifications does not indicate that he has any knowledge of the specific maintenance requirements for railroad signal and communications systems, and he has not cited the handling of these functions by the field employees of any real-world railroad other than WRPI. Instead, he has simply laid out separate signals and communications sub-departments using the conventional union craft divisions prevalent on Class I railroads including BNSF. These craft divisions have historically been very rigid in the railroad industry, in which applicable labor agreements require a strict division of labor among members of numerous specialized MOW crafts. On the many railroads at which WFA/Basin's MOW experts have worked (including DRGW, SP, UP, CNW, CSXT, Conrail and NS), signal maintenance was handled by members of the BRS and communications system maintenance was handled by members of the TCU. As a non-unionized start-up operation, the LRR is not subject to these rigid craft divisions.

In addition, the signals and communications disciplines have changed dramatically over the years. For example, until relatively recently, pole line installation and maintenance was one of the principal functions of communications workers. Today this work is virtually non-existent as pole lines have been superseded by changes in electronic technology, including the extensive use of microwave communications systems and the transmission of signal codes through the track itself. Modern signal and communications systems are integrated, and it makes sense to have the same employees maintain both where union work-rules do not get in the way. WRPI, which was a new, start-up operation, did it this way, and there is no reason why the LRR cannot do it this way, too.

Contrary to BNSF's dismissive footnote about WRPI on page III.D-135, the WRPI experience in the area of signals and communications maintenance is very relevant to the LRR. As a new, start-up operation, WRPI was able to combine the field signals and communications maintenance functions. Mr. McDonald testifies that by 1994, WRPI's eleventh year of operations (and its last full year of independence from UP), more than 60% of the WRPI system (excluding the Joint Line) had double track. WRPI had a CTC system with numerous power switches and a microwave communications system with radios that was state-of-the-art at the time – and not significantly different from the systems provided for the LRR although there are a few more bells and whistles today. Yet, in 1994, WRPI's field signal and communications systems maintenance was still provided, very satisfactorily, by a force of five combined Signal/Communications Maintainers.[64] The LRR has 18 similar employees, with one position (manned 24/7 by five employees) assigned to maintain the dispatching/CTC system.

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[64] Mr. Albin is correct that WRPI did not have a dispatching center of its own; dispatching and the CTC system were controlled by off-line CNW dispatchers located at Chadron, NE. The LRR does have a dispatching center, and WFA/Basin's experts have provided for one Signal/Communications Maintainer position, manned 24/7, to be assigned exclusively to maintenance of the dispatch center and related CTC equipment.

Mr. Reistrup notes that signals and communications maintenance were also combined at the MGA when he was president of that railroad in the late 1980's and early 1990's, when CTC was installed. In other words, the MGA also had Signal/ Communications Maintainers. Mr. Reistrup also recalls that on other railroads, including CSXT and its predecessors, craft divisions were so rigid that members of three different unions were needed to perform maintenance work involving signal shanties or huts. Only a member of the IBEW could work on the commercial power drops and electrical equipment, only a member of the BRS could work on the signal units, and only a member of the Sheet Metal Workers Union could work on other items.

Mr. Albin asserts that WFA/Basin has not provided enough field employees to maintain the signal system alone, much less also maintain the communications system.[65] He states that the LRR has 28,885 signal units; that approximately 60% of a signal maintainer's time is spent performing periodic FRA-required tests on all wayside and highway crossing signals, with the other 40% spent on maintenance; and that 24 full-time signal maintainers would be required to perform this work across the LRR system based on BNSF's "standard" of a maximum of 1,200 signal units per maintainer. See BNSF Reply Narr. at III.D-165 to 166.

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[65] WFA/Basin's MOW experts note that the LRR contracts out all but rudimentary maintenance of the communications system and its sub-parts, including radios and the microwave system. See WFA/Basin Op. Narr. at III-D-104. A substantial amount ($234,250) has been provided for annual contract maintenance of this system. See WFA/Basin Op. electronic workpaper "Spot Maint.xls."

There are several problems with Mr. Albin's testimony on this issue. First, he has greatly overstated the number of signal units the LRR requires, in part because of BNSF's proposal to equip the LRR with concrete ties rather than wood ties (a proposal that WFA/Basin's experts reject as unnecessary, not to mention contrary to Board precedent). BNSF proposes to install 45 additional dragging equipment detectors ("DEDs") at 28 locations due to its conversion from wood to concrete ties. See BNSF Reply Narr. at III.F-161. These additional DEDs, which BNSF agrees are not required if wood ties are used rather than concrete ties, involve a total of 450 signal units according to WFA/Basin's signals and communications expert, Victor Grappone. Elimination of these signal units alone reduces BNSF's total LRR signal unit count from 28,885 to 28,435.

In Part III-F-6-a below, Mr. Grappone explains that BNSF has overstated the LRR's signal units in a number of other respects, and that WFA/Basin itself overstated the number of AAR signal units on Opening. The correct number of signal units is 16,113. See WFA/Basin Rebuttal electronic workpaper ""Rebuttal Laramie River C&S Spreadsheet.xls," tab "AAR Units."

At page III.D-163 of BNSF's Reply Narrative, Mr. Albin states that each of the 13 field Signal/Communications Maintainers provided by WFA/Basin[66] would have to maintain an average of 1,688 signal units based on WFA/Basin's Opening count of signal

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[66] This excludes the five employees assigned to the central dispatch/CTC center.

units, and that this results in "an unmanageable workload" because it is above the upper end of BNSF's "standard" of 1,200 signal units per maintainer. However, Mr. Albin does not explain the basis for BNSF's "standard," and it is inconsistent with the standards used by other real-world railroads. For example, WFA/Basin Witness Kenyon notes that when he was Division Engineer at DRGW/SP, the average signal maintainer territory was in excess of 1,600 units. This included heavily utilized mainlines equipped with CTC and power switches between Denver and Pueblo which was used by BNSF coal trains going to Texas in addition to DRGW trains, and also between Dotsero, CO (17 miles east of Glenwood Springs) and Salt Lake City which was used by coal, manifest and daily Amtrak trains.[67] These DRGW lines are fair replications of the maintainer workload that the LRR will require – particularly given the greater proportion of multiple main track on the LRR compared with DRGW, which was mostly single track with passing sidings. This means the LRR maintainers do not have to travel long distances as the DRGW maintainers did.

The reduction in the LRR's total signal units to 16,113 (excluding the Guernsey CTC dispatch center) means that the LRR has only 1,239 signal units per maintainer (16,113 ÷ 13). This is well within the DRGW standard and close to BNSF's own standard.

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[67] These two lines had, respectively, 65 and 45 MGT per year over their single-track portions and thus replicate most of the LRR's main tracks in terms of use. It should also be noted that the LRR is situated entirely in the upper Great Plains and, unlike DRGW, there are no mountains along its route.

BNSF proposes a separate field sub-department for Communications, consisting of one supervisor and 10 maintenance workers who would be divided into two maintenance crews (with one foreman supervising both crews, combined). Each such maintenance crew consists of a Communications Technician and a Communications Maintainer. Although Mr. Albin states that these crews maintain the microwave system, he also includes (without explanation) two separate Microwave Technicians, as well as two Radio Shop Technicians. See BNSF Reply Narr. at III.D-168 to 169.

Mr. Albin's field communications staffing assumes that the LRR's in-house forces would perform most of the maintenance of the communications system. However, under WFA/Basin's MOW plan, most of the communications maintenance is programmed maintenance that is performed by outside contractors. The LRR's Signal/ Communications Maintainers inspect the system and perform minor and emergency repairs. Nonetheless, after reviewing Mr. Albin's testimony WFA/Basin's MOW experts have concluded that additional support should be provided for the Signal/ Communications Maintainers listed on Opening (particularly in light of the time they must spend on testing). Therefore, on Rebuttal they have provided two Signal/ Communications Technicians to work with the Maintainers. These employees will provide the Maintainers with additional expertise for emergency-type repairs to the signal and communications systems including the CTC, microwave, radios and other communications equipment.

Finally, WFA/Basin's MOW experts note that Mr. Albin provided for Signal Supervisors to be located at both Donkey Creek and Guernsey. BNSF Reply Narr. at III.D-164.[68] WFA/Basin's experts have concluded that having a single Signal/ Communications Supervisor based at Guernsey provides thin field supervision of the Signal/Communications maintenance function, and they agree with Mr. Albin that an additional supervisor should be added at Donkey Creek. However, consistent with WFA/Basin's treatment of this sub-department, the additional supervisor will be a Signal/Communications Supervisor and not a separate Signal Supervisor.

iv. **Electrical Maintenance Personnel**

WFA/Basin's MOW plan does not include an Electrical sub-department. Electrical maintenance work, which would be minimal in the first five years of the LRR's operations, will be contracted out. See WFA/Basin Op. Narr. at III-D-110. BNSF proposes a separate electrical sub-department to handle day-to-day electrical maintenance. This sub-department consists of two employees, a Foreman and a Journeyman Electrician. See BNSF Reply Narr. at II.D-169-170.

Much of the field electrical work described by BNSF is performed by the Signal/Communications Maintainers, who work routinely with the electrical equipment

[68] Mr. Albin provided a total of three supervisors, two at Guernsey and one at Donkey Creek. Mr. Albin provides no explanation of why two field supervisors are needed at Guernsey. The LRR has plenty of signal/communications supervisory staffing at Guernsey, including the Signal & Communications Engineer and two staff engineers, the Assistant Signal Engineer and the Assistant Communications Engineer. See WFA/Basin Op. Narr. at III-D-95, Table III-D-9.

and circuits in the course of their duties. However, after reviewing BNSF's evidence on this sub-department WFA/Basin's MOW experts agree that the LRR should have some specific in-house electrical capability. Accordingly, they have added one Electrical Technician. This employee will be conversant with the LRR's electrical systems, including those related to signals, communications and the Guernsey fueling facility and locomotive shop, and can quickly respond to electrical problems. He will coordinate his own capabilities with an outside contractor, so that if more than a single-person response is called for the contractor would be called in for assistance.

The Electrical Technician position will combine Mr. Albin's proposed Foreman and Journeyman Electrician positions, and coordinate with other departments as needed. WFA/Basin's experts strongly disagree with BNSF that a separate Foreman is needed to supervise a single electrical employee. Most of the duties Mr. Albin envisions for the foreman (see BNSF Reply Narr. at III.D-170) are the responsibility of the Engineering/MOW headquarters staff who manage the signals and communications maintenance function.

v. **Purchasing/Materials Personnel**

WFA/Basin centralized the purchasing function in the LRR's Finance & Accounting Department, providing two Managers of Budgets & Purchasing. To provide additional coverage of the purchasing function specifically related to MOW materials, WFA/Basin also provided a Manager of Administration and Budgets in the

Engineering/MOW general office staffing. WFA/Basin did not provide any employees for materials handling because such work could be assisted by contractors and most materials would be shipped directly from vendors to the worksite.

BNSF proposes a Purchasing/Materials sub-department to operate a small storehouse, consisting of three employees: a MOW Purchasing Manager, a Machine Operator/Truck Driver, and a Machine Operator (forklift). See BNSF Reply Narr. at III.D-171 to 172.

WFA/Basin do not agree that the LRR needs a three-person intermediary department for the purchasing/stores function. BNSF's proposed MOW Purchasing Manager appears to be a storekeeper. However, most MOW materials are shipped direct to the location where they are used (e.g., track materials to be used by the field track maintenance crew based at Donkey Creek are shipped directly to Donkey Creek). There is simply no need for three extra employees to handle/distribute materials.

WFA/Basin's MOW experts do agree that one additional Machine Operator (a combination truck driver/forklift operator) is needed to re-balance material stocks (many of which are delivered to Guernsey) and help distribute them to the appropriate MOW sub-department. BNSF did not specifically state why it included both a truck driver and a forklift operator, and there is no reason why one employee cannot drive a truck and operate a forklift. Therefore, one employee is sufficient to operate materials-handling equipment, rather than the two proposed by BNSF. This employee has been added to the field MOW staffing.

c. Compensation for MOW Employees

The salaries developed by WFA/Basin for the LRR's engineering, MOW and mechanical personnel as proposed on Opening (other than the Vice President-Chief Engineer & Mechanical, whose salary is included in G&A expenses) are set forth in Table III-D-10 on page III-D-102 of WFA/Basin's Opening Narrative. WFA/Basin have added eight field MOW employees on Rebuttal, and shifted three Inspector employees from the Engineering/MOW general office staff to the field MOW staff (with no change in salary). The added employees include three System Track Crew members (one of whom serves as Foreman), one Signal/Communications Supervisor, two Signal/ Communications Technicians, one Electrical Technician, and one Machine Operator for Purchasing/Stores. The System Track Crew Foreman and Members are compensated at the same level as the Track Maintenance Crew Foreman and Track Maintenance Crew Members, as shown in Opening Table III-D-10. The base-year compensation for each of the Signal/Communications Technicians is $60,223, and $57,884 for the Electrical Technician.[69] The Machine Operator-Purchasing/Stores is compensated at the same level as the Machine Operators, as shown in Opening Table III-D-10.

[69] See WFA/Basin Rebuttal electronic workpaper "LRR Salaries Reb.xls."

BNSF accepts the use of BNSF's 2004 Wage Forms A and B as the basis for calculating the annual compensation for the LRR's general office and field Engineering/MOW employees. However, rather than calculating an average salary for all employees included within each STB occupation code, BNSF calculated salaries separately for each position because BNSF's real-world rates of pay and overtime vary by position for MOW personnel. See BNSF Reply Narr. at III.D-172 to 173. BNSF also added a { } percent overtime allowance, which purportedly "reflects BNSF engineering office operating expense for overtime in 2004," and applied a { } percent additive for 2004 fringe benefits rather than the 38.5 percent additive used by WFA/Basin. Id. at III.D-173 to 174. Finally, BNSF applied an additional additive, specific to each sub-department, for MOW materials and supplies expense (which BNSF asserts is in addition to the additive used by WFA/Basin for office materials and supplies). Id. at III.D-174 to 175.

Although BNSF states that "Mr. Albin also calculated labor costs for OE track personnel based on BNSF's Wage Forms A & B" (id. at III.D-173), Mr. Albin did not use BNSF's Wage Forms A & B to estimate MOW compensation levels. Instead, Mr. Albin's calculations were based on data from a combination of disparate sources and numerous unsupported assumptions. Moreover, in some instances, such as employee fringes, Mr. Albin's sources contradict other reports submitted by BNSF to the STB in the normal course of business. Despite Mr. Albin's characterization, his method for computing maintenance of way compensation is far less "precise" (id.) than what would result had he used Wage Forms A & B.

To determine compensation for field personnel, Mr. Albin used hourly rates from a BNSF/Brotherhood of Maintenance of Way ("BMOW") agreement for various positions.[70] Mr. Albin applied the hourly BMOW wage rates by craft to an assumed work effort of 2,080 hours per year. Mr. Albin then assigned a { } overtime percentage to all MOW employees, regardless of craft, based on a 2004 BNSF Way and Structures Budget Report.

Mr. Albin's assumptions of 2,080 hours worked per year and an overtime rate of { } are not specific to any MOW personnel craft and wholly unnecessary, since the actual hours worked and actual compensation by employee classification are available from BNSF's Wage Forms A & B which was relied on by WFA/Basin. WFA/Basin continue to use actual straight time wages plus overtime as reported in BNSF's Wage Forms A&B for MOW personnel compensation rather than BNSF's generalized 2,080 hours per year and { } overtime rate for all employees.

BNSF's compensation for supervisory employees was developed using a report of unknown origin entitled "Total Pay by Title by Year," which is included in its Reply electronic workpaper "MOW Compensation.pdf." This report covers BNSF annual compensation for the years 1998 to 2000. Using this report, Mr. Albin calculated the

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[70] See BNSF Reply electronic workpaper "MOW Compensation.pdf."

average annual pay for each supervisory position for the 1998 to 2000 time period, then multiplied the result by 12% to derive estimated 4Q04 salaries. Mr. Albin provided no support for his 12% factor to adjust average 1998 to 2000 wages to 4Q04 wage levels. The use of outdated information, increased by an unsupported wage factor, is clearly inferior to using the current BNSF Wage Form A&B data relied on by WFA/Basin and should be rejected by the Board.

Finally, Mr. Albin assumes a { } fringe rate for all MOW employees. The source for this fringe rate is the 2004 Way and Structures Budget Report discussed previously. This fringe benefit rate of { } contradicts the actual data reported in BNSF's 2004 R-1 Annual Report. Data from the 2004 R-1 shows a fringe benefit rate for Way and Structures employees of 38.7%,[71] which is nearly identical to the 38.5% fringe rate used by WFA/Basin. As discussed in WFA/Basin's Op. Narr. at III-D-31, the 38.5% fringe rate is based on that paid to all railroad employees working in the State of Wyoming. This fringe rate was accepted by BNSF for all other LRR employees and should also be applied to MOW employees rather than using BNSF's unsupported { } MOW fringe rate.

WFA/Basin's MOW compensation levels as described in their opening evidence are the best evidence record and WFA/Basin continue to rely on this evidence

[71] See WFA/Basin Rebuttal electronic workpaper "MOW Fringe.xls"

on Rebuttal. Table III-D-7 below provides a comparison of MOW employee compensation by category.

Rebuttal Table III-D-7 LRR Maintenance Personnel Compensation Comparison (Operating expense only, includes employee fringe)			
Department	**WFA/Basin**	**BNSF**	**Difference**
General Office	$780,942	$445,352	($335,591)
Track	$3,478,662	$4,324,033	$845,371
Bridge & Building (B&B)	$232,878	$599,712	$366,834
Signals & Communications	$1,929,949	$3,503,889	$1,573,940
Electrical	$80,174	$145,180	$65,006
Purchasing/Stores	$50,981	$193,420	$142,439
Total	$6,553,587	$9,211,585	$2,657,998

d. Track Maintenance Equipment

WFA/Basin discussed (and specified) the equipment needed by the LRR's MOW forces in detail at pp. III-D-118 to 126 of their Opening Narrative; see also WFA/Basin Op. electronic workpaper "SpotMaint.xls," tab "Equipment."

WFA/Basin's MOW experts note that the System Track Crew they have added on Rebuttal requires the same equipment that each of the five field Track Maintenance Crews has. Thus one of each of the following pieces of equipment needs to be added: hi-rail crew-cab boom truck, air compressor, rail drill, rail saw, hydraulic rail puller, impact wrench, straight grinder, and tamping tool set. Details are provided in

WFA/Basin Rebuttal electronic workpaper "Spot Maint Rebuttal.xls," tab "Equipment." Utility vehicles are also needed for the Signal/Communications technicians and the Electrical Technician who have been added on Rebuttal. The Machine Operator-Purchasing/Stores would need a forklift and a flatbed truck for pickups and deliveries.

BNSF's Witness Albin proposes a number of additions to the MOW equipment specified by WFA/Basin's MOW experts. His list of MOW equipment for each crew and field sub-department is contained in BNSF Reply electronic workpaper "LRR MOW Equipment.pdf." However, Mr. Albin's experience and focus is based on the equipment that BNSF (a mega-sized company) uses with its large force of field maintenance employees. There is no need to stock the LRR, which is a relatively small company of limited geographic scope, with every machine imaginable.

In addition, Mr. Albin has not explained why specific additional pieces of equipment are needed except in very general terms, e.g.:

> [E]quipment that is used regularly, such speed swings, rail grinders, rail saws, drills, air compressors, generators and rail expanders, must be in sufficient supply to allow each crew ready access to do the small jobs such as grinding frogs and switches and replacing rail that such crews must perform daily.

See BNSF Reply Narr. at III.D-177. In fact, this is exactly the approach taken by WFA/Basin's MOW experts; each field crew that needs particular equipment is provided with it. For example, each of the five Track Maintenance Crews and the System Track Crew is equipped with rail saws, drills, air compressors, etc. (WFA/Basin Op. Narr. at

III-D-120 to 122), and each of the three Welding Crews is provided with a straight and a profile rail grinder, a 400-amp welder, and oxy-acetylene equipment (id. at III-D-122 to 123).

Mr. Albin lists the MOW equipment he asserts is needed by the LRR at pp. 5-6 of BNSF Reply Exhibit III.D.4-1. Equipment to be used for "spot" maintenance work is listed on page 5, and includes a brush cutter, tractor mower, cribbers, tie cranes a motor grader, a Jordan spreader, a Russell snowplow, and two cranes. However, outside contractors have these or similar types of equipment, and use them as part of their contracted services. Work that formerly was performed by older pieces of highly specialized equipment, such as the Jordan Spreader (plow) and Russell Snowplow, can now be handled with snow pack-equipped ballast regulators, front end loaders, a Gradall and speed swings, which come with bucket attachments.

Page 6 of BNSF Reply Exhibit III.D.4-1 lists equipment proposed for "Annual Replacement" work. Since the LRR contracts out rail, tie, surfacing and bridge work, items such as anchor machines, double brooms, a Gaylen crane, and spike reclaimers do not need to included in the LRR's equipment roster as they will also be provided by the contractors.

One piece of equipment listed on page 6 merits more discussion. This is the bridge derrick. This is a large piece of equipment shown with an ownership cost of nearly $1.9 million and an annual operating cost of about $192,000.

In all likelihood, a bridge derrick will never be used by the LRR. On a large system like BNSF's, which spans a very large geographic area subject to different weather conditions and which has hundreds of aging bridges, the law of large numbers suggests that major bridge failures can be expected and that purchasing a bridge derrick would be a prudent investment. That would not be the case for the LRR. Given its small size and the relative lack of annual rainfall in its territory, it is exceedingly unlikely that the LRR would experience a major washout or other catastrophic failure of its brand-new bridges – expecially since WFA/Basin used BNSF's latest, 100-year-life bridge designs. Moreover, most of the LRR's bridges are accessible by modern, heavy-duty rubber-tire or crawler cranes that are common throughout the contracting industry and that are preferable to a bridge derrick which is an on-track crane. Thus, it does not make sense for the LRR to purchase a $1.9 million piece of equipment that likely will be idle throughout the railroad's 20-year DCF life.

Nevertheless, in the unlikely event that a catastrophic bridge problem were to occur and a bridge derrick is the only piece of equipment that can do the job, the LRR could borrow a bridge derrick from BNSF, UP or another source on a temporary basis. Railroads -- even the fiercest of competitors – have a long record of mutual cooperation in the face of natural disasters and service failures. Carriers have more to gain by cooperating with each other at such times, knowing that "tit for tat" is the likely response facing a firm that rebuffs calls for assistance. By stepping into the shoes of the incumbent

BNSF for its traffic group, the LRR would also inherit this continuing record of mutual cooperation.[72]

In other respects, Mr. Albin has also provided much larger numbers of individual pieces of equipment than a prudent LRR maintenance officer would select. For example, he includes a total of 12 speed swings, five for spot maintenance and seven for annual replacement maintenance. A speed swing is a large piece of hi-rail equipment equipped with a boom for lifting and moving rails, ties and other items. WFA/Basin's MOW experts equipped the LRR with two speed swings – or one for the territory covered by each of the two Field Maintenance Managers.

Mr. Albin proposes to equip each of the five Track Maintenance Crews with a speed swing (thus increasing the total number of speed swings for field track maintenance from two to five), but he never explains why each crew would need a speed swing in addition to its hi-rail boom truck. The boom on this truck is capable of lifting rails and ties. The two speed swings were provided to supplement the track crews' hi-rail boom trucks when more lifting equipment is needed for particular tasks (such as rail replacements following the periodic operation of the ultrasonic test car). Having five of these machines for spot maintenance is overkill as they would be idle most of the time.

[72] WFA/Basin's experts also note that because their operating plan models the peak traffic week in the LRR's entire 20-year existence, the LRR has the capacity to assist other carriers such as BNSF by contributing power, equipment and crews to assist them at a time of crisis.

Mr. Albin also fails to explain why he assigned seven more speed swings for "annual replacement" work, which is performed by contractors who would provide their own speed swings to the extent needed. This is a classic example of inflating the LRR's equipment needs in order to drive up capital and annual operating costs.

After reviewing Mr. Albin's equipment lists for the various MOW sub-departments (BNSF Reply electronic workpaper "LRR MOW Equipment.pdf"), WFA/Basin's MOW experts concur that a few pieces of equipment were omitted from their Opening list and should be added. These include:

> Track - Add one cribber and one small rail heater. These items are for standby emergency service in the event of a derailment with rail damage. This would enable quick replacement of sections of CWR without the involvement of a contractor. These pieces of equipment would be used infrequently, so there is no need for two cribbers and seven rail heaters as Mr. Albin proposes.
>
> B&B - Add two gondolas for bridge material and one flat car for piling. These cars are for standby emergency materials for use by the bridge contractor.
>
> Signals/Communications: Add one trencher. A trencher is needed for occasional ditch digging to install cable.

BNSF also asserts that WFA/Basin have substantially understated the cost of operating and maintaining MOW equipment. WFA/Basin provided 5% of annual ownership costs for equipment maintenance, which BNSF asserts is arbitrary. BNSF instead relies on a special study of these costs to increase them from $234,250 in the base year to $2.6 million. See BNSF Reply Narr. at III.D-178 to 179.

BNSF's special study of operating and maintaining MOW equipment is overstated for three reasons. First, the $2.6 million in operating expenses contained in BNSF's special study is based on the overstated equipment quantities which BNSF claims are needed for the LRR. When WFA/Basin's MOW equipment requirements are substituted for those proposed by BNSF, the MOW equipment operating expense, using BNSF's unit costs, is reduced to $1.2 million in the base year.

Second, many of BNSF's operating unit costs for individual types of MOW equipment are significantly overstated as they include both shop labor and field labor. See BNSF Reply electronic workpaper "MOW Equipment Cost.pdf." As the field labor costs are already included in the MOW expenses for field personnel, the addition of field labor to the MOW equipment operating costs results in a double-count of expense. Twelve of the 25 distinct types of operating equipment include both shop labor and field labor. Removing the field labor component for each of these 12 equipment types and applying the resulting unit costs to WFA/Basin;'s equipment quantities reduces the MOW equipment operating costs to $984,597 in the base year. See WFA/Basin Rebuttal electronic workpaper "SARR Lease v Purch Work Equip.xls."

Finally, BNSF's assertion that its MOW equipment operating cost is based on a special study of actual operating costs is false with regard to 11 of BNSF's 25 distinct types of MOW equipment. BNSF's special study is based on a 1995 analysis shown in Reply electronic workpaper "MOW Equipment Cost.pdf." This document provides no operating-cost information with regard to 11 of the equipment types included in BNSF's Reply electronic workpaper "III D 4 Maintenance of Way.xls," sheet "Annual Spot Equip." Thus, BNSF has provided no documentation supporting its operating cost for these 11 MOW equipment types, which include 10 of the 12 different types of hi-rail vehicles and the oxy-acetylene welder.

Because of the overstatements in BNSF's equipment operating expenses and its failure to support its unit costs for many of the items, BNSF's $2.6 million in MOW equipment operating expenses should be rejected and WFA/Basin's MOW equipment operating expenses should be accepted as the best evidence of record.

e. <u>OE Contract Work</u>

Consistent with the practice of "both large and small railroads" (BNSF Reply Narr. at III.D-179) WFA/Basin's MOW plan uses contractors for some maintenance activities that constitute operating expense ("OE"). These contracted maintenance items, which BNSF accepts (<u>id.</u>), are described at WFA/Basin Op. Narr. III-D-104 to 110. BNSF's Witness Albin takes exception, however, to what he refers to as "the wholesale contracting of communication, bridge and fueling facility maintenance, electrical work, derailment cleanup and restoration of track, and track program maintenance." BNSF Reply Narr. at III.D-179.[73] In addition, Mr. Albin argues that WFA/Basin omitted some required maintenance activities such as stabilization of cuts and

[73] Program track maintenance, of course, is not treated as operating expense but rather is capitalized under the DCF model.

fills, tunnel maintenance, and coal dust cleanup. He also asserts that some contracted work (in particular ultrasonic rail testing and rail grinding) needs to be performed more frequently than WFA/Basin proposed. Id at III.D-180 to 185.

WFA/Basin's MOW experts explained the kinds of activities the LRR will contract for, and why, in considerable detail. See WFA/Basin Op. Narr. at III-D-103 to 118. Mr. Albin's sole stated basis for objecting to the contracting out of some non-routine maintenance activities is that "BNSF has found it more efficient to handle either all or a portion of these responsibilities internally." Id. at III.D-179. However, the LRR is not required to use in-house forces to perform various maintenance activities just because the real-world BNSF does so. As WFA/Basin noted earlier, BNSF's principal PRB line has a history of maintenance problems because of the way it was originally constructed, and BNSF (and Mr. Albin) are used to throwing people (including seasonal gangs) at these problems repeatedly in order to fix them. BNSF also uses its seasonal gangs for construction projects such as the addition of third main track on the Orin Subdivision – projects the LRR will not have. There is nothing unusual about contracting out major bridge maintenance, derailment cleanup/track restoration, and program replacement of track components such as rail, ties and ballast – and indeed, as explained at pp. III-D-187 to 188 below, this is economically rational for a railroad such as the LRR. Moreover, BNSF itself has accepted the use of contractors for track and other programs in prior SAC cases – as has the Board. See, e.g., Xcel I at 80-81.

WFA responds as follows to BNSF's discussion of specific items of contract maintenance where there is a disagreement between the parties.

i. Vegetation Control

BNSF accepted WFA/Basin's costs for weed spraying, except for the unit costs for regular (as opposed to noxious) weed spraying which, according to BNSF, excludes the cost of the chemicals. BNSF provides no support for its assertion that the contractor's unit cost does not include the necessary chemicals. A review of the contract provided by BNSF in discovery shows that it is silent on this point. The chemicals are a critical part of weed spraying. Therefore, the contract should logically include the chemicals unless it specifically states otherwise.

WFA/Basin also note that BNSF's costs are not based on any third-party documentation. Instead, BNSF's costs are based on an e-mail exchange between BNSF in-house personnel and Mr. Albin that purports to provide BNSF's current prices for a variety of activities, including weed spraying. See BNSF Reply electronic workpaper "BNSF Contract Unit Costs.pdf." Such self-serving data cannot be justified without further support, especially since BNSF provided a wealth of maintenance contract materials in discovery that contradict the e-mail – weed spraying is just one example. For these reasons, WFA/Basin continue to use the unit costs developed on Opening.

ii. Ultrasonic Rail Testing

BNSF has accepted WFA/Basin's unit cost for ultrasonic testing. However, rather than simply testing four times a year, as provided by WFA/Basin's MOW experts, BNSF proposes to test based on BNSF's "standard" which is to test all rail every 15 MGT with a minimum of four tests per year on rail that handles 50 MGT or more and two tests per year on rail that handles less than 50 MGT. BNSF Reply Narr. at III.D-181.

Several LRR line segments handle considerably more than 50 MGT (albeit with double track), while other lines handle considerably less than 50 MGT. When all is said and done, however, WFA/Basin's provision for testing all track four times per year results in testing 1,584.6 miles of rail per year[74] – which is actually <u>more</u> miles than the 1,519 miles BNSF proposes to test annually. Given the parties' use of the same unit cost, WFA/Basin's total annual cost for ultrasonic rail testing ({ }) is higher than BNSF's proposed annual cost of ${ }.

iii. Rail Grinding

On Opening, WFA/Basin's experts provided for rail grinding at frequencies of 50 MGT on curves three degrees or more. In other areas, the grinding frequencies were 100 MGT for standard rail on tangents and curves of less than three degrees, and 300 MGT on premium rail. Switches would be ground at the same frequencies <u>See</u> WFA/Basin Op. Narr. at III-D-111 to 112 and workpapers cited therein. Unit costs for

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[74] <u>See</u> WFA/Basin Op. electronic workpaper "SpotMaint.xls," tabs "Contract Work" and "unit Costs.

grinding were based on BNSF contract invoices provided in discovery (id.). Consistent with the accounting practice of BNSF and other railroads, grinding costs are capitalized rather than being treated as part of annual operating expense. See WFA/Basin Op. electronic workpaper "Rail Grinding Capitalization.pdf."[75]

BNSF disagrees with both the grinding frequencies and the unit costs used by WFA/Basin. With respect to grinding frequency, BNSF notes that its "general policy" is to grind curves greater than three degrees every 15 MGT, curves less than three degrees every 30 MGT, and tangents every 60 MGT "to maximize rail life." See BNSF Reply at III.D-183 to 184. However, as far as can be discerned from BNSF's evidence on this issue, BNSF's "policy" does not distinguish between standard rail and premium rail.

WFA/Basin equipped the LRR with premium rail between Donkey Creek and Guernsey, and in other areas on curves of 3 degrees and greater. This comprises more than 85 percent of the LRR's total track-miles. BNSF, however, proposes to equip the LRR with premium rail only in curves of three degrees or more; standard rail is used everywhere else. See BNSF Reply Narr. at III.B-47 and III.F-111.[76] Premium rail requires grinding much less frequently than standard rail, but BNSF provides no evidence

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[75] Capitalization of rail grinding is also discussed in Part III-H-1-c of this Rebuttal Narrative.

[76] BNSF uses a 141-pound rail section for premium rail and a 136-pound rail section for standard rail; WFA/Basin use 136-pound rail throughout. The 141-pound section on curves three degrees and more is based on BNSF's current standard (id. at III.F-111), but in any event the unit cost is virtually identical for both rail weights.

as to how its proposed grinding frequencies would be affected if it were to equip the LRR with premium rail to the same extent WFA/Basin did.

Moreover, other Class I railroads grind rail less frequently than BNSF's "general policy" calls for. In its discussion of a trade article on a rail-grinding study by CN and TTCI that WFA/Basin cited in support of their proposed grinding frequencies, BNSF noted that CN's policy is to grind at intervals of 20 MGT in territory with severe conditions and a high percentage of curves, and at intervals of 30 MGT in territory with moderate conditions and a lower percentage of curves. See BNSF Reply Narr. at III.D-182 to 183. The LRR route lies entirely in the high plains, which are relatively flat, so it fits CN's "territory with moderate conditions and a lower percentage of curves."[77] There is no reason why the LRR could not follow CN's standard (which appears to apply to standard rail) rather than BNSF's.

After reviewing BNSF's evidence on this issue, WFA/Basin's MOW experts have concluded that the rail grinding frequencies should be adjusted upward to be more consistent with the CN standard cited by BNSF, and to maximize rail life consistent with BNSF's standards. The adjusted rail grinding intervals are every 30 MGT in curves, every 60 MGT for standard rail in tangent track, and every 100 MGT for premium rail in

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[77] This is confirmed by the fact that the LRR has only 40 curves of three degrees or more in 218 route miles. See WFA/Basin Op. electronic workpaper "Curve Data Worksheet.xls."

tangent track. Again, it should be noted that WFA/Basin have equipped all curves 3 degrees and above, and most curves less than 3 degrees, with premium rail.

With respect to unit costs for grinding, WFA/Basin used a cost of { } per pass mile for rail grinding and { } per mile for switch grinding. These unit costs were based on contracts and invoices provided by BNSF in discovery. BNSF disputes these unit costs. It asserts that the unit cost for rail grinding based on its contract documents should be { } per pass mile, and that the unit cost for switch grinding should be { } per switch based on its actual 2004 cost for switch grinding. See BNSF Reply Narr. at III.D-185.

WFA/Basin's MOW experts disagree with BNSF's change in unit costs. The Opening unit costs were developed directly from BNSF contractor invoices, including additional fuel and water costs. BNSF's claims that it incurs additional costs (e.g., flagman time), but it does not quantify them. Moreover, BNSF does not explain why the LRR's field MOW personnel could not assist on such matters. In any event, BNSF replacement unit cost is based on the same self-serving e-mail from a BNSF employee to Mr. Albin that BNSF used to develop weed spraying costs. Thus, WFA/Basin continue to use their Opening rail grinding unit costs. BNSF's arguments with respect to switch grinding are similarly flawed in that the additional costs are unexplained, and it relies on the same e-mail.

iv. <u>Bridges and Buildings</u>

Both parties used 0.5 percent of the original cost of the LRR's buildings to account for contract maintenance, although BNSF applied this percentage to its restated (higher) building cost discussed in Part III.F-7. See BNSF Reply Narr. at III.D-186. However, BNSF asserts that this applies only to major repairs (which are capitalized), and not to day-to-day maintenance and upkeep which are performed in-house on BNSF. Id. BNSF states that it included employees in the LRR's field MOW forces to perform day-to-day maintenance and upkeep of buildings (id.), but in fact it included only a bridge-maintenance crew. WFA/Basin continue to use 0.5 percent of original building cost as the appropriate amount for annual building maintenance cost.

v. <u>Ditching</u>

WFA/Basin provided for ditching and cleaning of 10 percent of the LRR's route miles annually, or 21.8 miles per year. BNSF accepts the need for ditching of 10 percent of the LRR's route miles annually, but notes that WFA/Basin's total annual ditching costs are based on ditching only 10.72 route miles per year. See BNSF Reply Narr. at III.D-186 to 187. WFA/Basin acknowledge this error and have corrected their spreadsheets to reflect ditching of 21.6 miles route miles per year (which, consistent with practice in prior SAC cases, excludes the LRR-owned portion of mine lead tracks).

In addition, BNSF states that WFA/Basin applied the wrong unit cost because they used a unit cost per pass mile from BNSF contract invoices whereas they should have used a unit cost per track mile. Id. at III.D-187. WFA/Basin's MOW experts agree that they erroneously used the pass mile rather than the track mile cost, which is essentially a route mile cost since ditches are only located on the outsides of the roadbed. BNSF states that the track mile cost, based on the invoices, is { }. Id. But again, BNSF ignores its actual contract costs in favor of its system average unit cost of { }. Actual unit costs are preferable to system average costs where there is ample support for the actual costs. Thus, on Rebuttal, WFA/Basin have used BNSF's calculation of the track mile costs from its actual maintenance contracts. WFA/Basin have also expanded the Opening ditching quantities so that the LRR ditches 10 percent of its route miles each year than the five percent they inadvertently used on Opening.

vi. Snow and Storm Debris Removal

WFA/Basin included estimated costs of $50,000 annually for snow removal and $25,000 annually for storm debris removal. BNSF used its 2004 system-average cost of ${ } per track mile for both snow and other weather-related cleanup cost and applied it to the LRR's restated track miles, resulting in a total annual cost of ${ }.

WFA/Basin disagree with BNSF's track mile methodology. Storm debris is minimal in this territory given the small amount of vegetation and structures, and to the extent the LRR's frequent trains do not keep the mainline track clear, the LRR's ballast regulators can assist. Set-out tracks, yards and parking lots also require snow removal on occasion. Given that WFA/Basin provided $75,000 per year for this activity, and BNSF provided a {   } cost for the mainlines plus yard and set-out tracks, WFA/Basin's MOW experts submit that their figure is more than generous. Therefore, they continue to use the same snow removal and storm debris clearing costs on Rebuttal.

vii. Derailment and Casualty (Washout) Repairs

BNSF disagrees with the annual amounts allocated by WFA/ Basin for derailments ($750,000) and washout casualties ($40,000).[78] However, BNSF agrees that the total annual cost for these two items is $790,000. See BNSF Reply Narr. at III.D-188.

viii. Environmental Cleanup and Prevention

WFA/Basin included $24,000 annually for environmental cleanup, primarily related to the locomotive fueling facilities at Guernsey Yard. See WFA/Basin Op. at III-D-117 to 118. BNSF proposes a total of ${   } for "environmental mitigation and fuel repair costs" based on average annual mitigation/fuel-cleanup and inspection/maintenance costs at its Belen, NM fueling facility over the past five years. See BNSF Reply Narr. at III.D-188 to 189.

BNSF has provided few details as to the reasons for the environmental mitigation/cleanup totaling ${   } over the past five years at Belen. For example, this cost may have covered previous accumulation of spilt diesel fuel, thus requiring larger average annual expenditures than are likely over a longer period.

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[78] See WFA/Basin Op. Narr. at III-D-115 to 117.

It is also telling that BNSF chose not to present any information on annual fuel clean-up costs for Guernsey, where BNSF has locomotive fueling facilities that are comparable to the LRR's Guernsey fueling facilities.[79] However, BNSF's workpapers do contain some information on such costs. The workpapers show that the estimated 2005 cost for fuel clean-up at Guernsey is only { }.[80] This is far less than the ${ } annual fuel clean-up cost at Guernsey proposed by BNSF, and using WFA/Basin's proposed environmental cleanup figure of $24,000 allows for some additional cost for annual inspection/maintenance.

ix. Yard Cleaning

WFA/Basin included $27,862 for annual yard cleaning based on a frequency of cleaning each of the LRR's three yards once a year and unit costs from a BNSF contract for yard cleaning. See WFA/Basin Op. Narr. at III-D-105 and Op. electronic workpaper "SpotMaint.xls," tab "Unit Costs." BNSF has accepted the yard cleaning frequency and the contract unit costs, but asserts that WFA/Basin made "aggressive assumptions regarding the number of days it will take to perform yard cleaning and therefore understates total costs for this activity." See BNSF Reply Narr. at III.D-189.

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[79] WFA/Basin's locomotive expert, K.M. Claytor, has seen BNSF's fueling facilities at both Belen and Guernsey, and reports that BNSF dispenses considerably more fuel at Belen than it does at Guernsey.

[80] See BNSF Reply Workpapers Vol. I, p. BNSF.RP.WP.III.D.4-127 (also included as BNSF Reply electronic workpaper "Environmental Costs.pdf").

BNSF's argument is unfounded. BNSF provides no rationale for its "aggressive assumption" claim, nor does it explain why it opted to use its system average yard cleaning when actual yard cleaning cost data are available. WFA/ Basin used actual BNSF contractor data produced in discovery, which showed that the contractor spent { } days cleaning and { } days vacuuming the Guernsey Yard in 2003. WFA/ Basin's unit costs thus were based directly on the costs of the cleaning services rendered to BNSF for the Guernsey Yard, and also included { }, which were included in the contractor invoice. For the Donkey Creek and South Logan Yards, WFA/Basin assumed that each yard would need one day for cleaning and one for vacuuming. This is hardly an aggressive assumption because both yards are much smaller than Guernsey Yard, and those yards do not receive potentially messy deliveries such as sand for locomotives. Accordingly, WFA/Basin continue to use their Opening yard cleaning costs.

x. <u>Special Maintenance Costs</u>

BNSF asserts that it has "special maintenance problems" in certain areas of the LRR route, including ballast fouling by coal dust and embankment stabilization issues. It also asserts that WFA/Basin's MOW plan does not address these problems and that the LRR will incur additional maintenance costs for these items, just as BNSF does. <u>See</u> BNSF Reply Narr. at III.D-189 to 193. In fact, WFA/Basin's MOW plan does provide for these "special maintenance" items.

(a) Coal Dust in the PRB

The problems caused by coal dust blowing from loaded coal cars on the Joint Line have been widely publicized in recent months, and the accumulation of coal dust over a period of 25 years has resulted in extensive undercutting and other special track programs on the Joint Line beginning in 2003, with a major program underway in the second half of 2005. WFA/Basin's MOW plan takes the coal dust problem into account; indeed, one of the functions of the LRR's ditching and spot-surfacing crews (which BNSF proposes to eliminate) is to remove coal dust from the Orin Subdivision ballast, subgrade and ditches periodically. See WFA/Basin Op. Narr. at III-D-87.[81] However, most of the work required to remove coal dust is annual undercutting which would be performed by outside contractors.

Mr. Albin notes that BNSF budgeted ${ } for coal-dust cleanup on the Orin and Black Hills Subdivisions in 2003 and 2004,[82] and he allocates ${ } annually to address coal dust problems on the LRR which is based on "continuation of the 2003/2004 program and averaging the expenditures out over five years." See BNSF Reply Narr. at III.D-191 and BNSF Reply Workpapers Vol. I, p. BNSF.RP.WP.III.D.4-128 (also reproduced in BNSF Reply electronic workpaper "Coal Dust.pdf").

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[81] WFA/Basin's MOW experts identified the same areas on the Orin Subdivision whre coal-dust buildup is a problem that BNSF Witness Albin observed (id. and BNSF Reply Narr. at III.D-191).

[82] The LRR's lines replicate only 6.05 route-miles of BNSF's Black Hills Subdivision. See WFA/Basin Rebuttal Exhibit III-B-1, page 2.

BNSF's workpapers show that { }% of the 2003-2004 expenditure to address coal dust problems (primarily through undercutting[83]) was billed to UP as co-owner of the jointly owned portion of the Orin Subdivision, and that almost all of the { }% that was absorbed by BNSF was treated as a capital expenditure rather than operating expense. See BNSF Reply Workpapers Vol. I, pp. BNSF.RP.WP.III.D.4-129 to 149.[84] Thus it appears that { }% of the ${ } annual expenditure proposed by Mr. Albin represents work that BNSF would bill to UP.

In this regard, it should be noted that more than half of the coal traffic that moves over the real-world Joint Line is UP traffic. This traffic will not move over the LRR's tracks. Less traffic means less coal dust blowing from the coal cars, which in turns means less work is required to remove coal dust from the ballast and subgrade. In addition, much of the real-world Joint Line has three main tracks, whereas the portion of the LRR's Orin Subdivision that replicates the Joint Line has only two main tracks from which coal dust would need to be removed. Thus, the LRR should spend considerably less for coal dust removal than the real-world BNSF does.

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[83] Coal dust removal is accomplished through the undercutting process, where ballast is lifted, cleaned and replaced. Sufficient amounts of new ballast are then added in order to bring the track back to its original track elevation.

[84] A total of { } was allocated to operating expense in 2003 under AFE A033162. See BNSF Reply Workpapers Vol. I, p. BNSF.RP.WP.III.D.4-146. Nothing was allocated to operating expense in 2004.

The LRR would capitalize most of the ballast undercutting cost that it incurs, just as BNSF does. Review of BNSF's R-1 Annual Reports for the years 2000 through 2004 shows that BNSF's annual operating expense related to ballast as a percentage of its capital expenditures related to ballast averaged 4.13 percent for this five-year period. <u>See</u> WFA/Basin Rebuttal electronic workpaper "ballast.xls." Applying this percentage to the LRR's investment capital expenditure for ballast divided by its 28-year useful life produces an annual operating expenditure for ballast of $102,303.[85]

(b) <u>Stabilization Issues</u>

BNSF asserts that it incurs additional costs to maintain two tunnels and the embankment for a "daylighted" tunnel, and for embankment cleanup in Wendover Canyon. It argues that the LRR would incur similar costs. <u>See</u> BNSF Reply Narr. at III.D-191 to 193. WFA/Basin's MOW experts disagree.

<u>Tunnel Nos. 1 and 3</u>. These old tunnels are located west (geographically north) of Guernsey. BNSF states that over the past three years it has spent an annual average of ${ } for Tunnel No. 1 and ${ } for Tunnel No. 3 to repair the tunnel linings, which consist of timbers walls and arch sets, and to repair the tunnel

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[85] Initial LRR capital investment for ballast, including mobilization and contingency costs, equals $69.4 million. Dividing this amount by the 28-year useful life produces an annual capital expenditure of $2.478 million (rounded). 4.13% of this amount equals $102,313.

drainage systems. Id. at III.D-192.[86] However, the LRR will not construct these tunnels with timber walls and arch supports; rather they will be modern tunnels with steel arch supports, concreting and modern drainage. Mr. Albin's inclusion of historical maintenance costs for the existing wood-lined tunnels thus is inappropriate. In addition, the use of modern tunnel construction materials also eliminates the need for a B&B crew to perform tunnel maintenance work.

Former Tunnel No. 2. Several years ago, BNSF "daylighted" former Tunnel No. 2 located at Canyon Subdivision MP 98.15 west of Guernsey. Given the use of modern construction techniques, WFA/Basin have chosen to construct a cut rather than a tunnel for the LRR at this location. Mr. Albin asserts that BNSF has had to perform annual maintenance to protect against erosion of the steep walls on either side of the daylighted tunnel; that BNSF spent ${ } for these repairs in 2002 and 2003; and that "BNSF is continuing to perform repair work at an estimated annual expenditure of { }" which would also have to be borne by the LRR. Id. at III.D-192.

There are two problems with Mr. Albin's testimony on this issue. First, BNSF constructed steep walls with hard rock bolts and shotcrete when it daylighted the tunnel. BNSF does not explain why the shotcrete-with-bolts slope protection it used for the cut has proven problematic. This may have been the result of doing the work quickly

[86] Mr. Albin's workpapers indicate that BNSF spent nothing to maintain Tunnel No. 1 for a period of ten years, and that all of the ${ } million spent on this tunnel in 2004 and 2005 (50% of which was capitalized) was to replace the existing tunnel lining. See BNSF Reply Workpapers Vol. I, pp. BNSF.RP.WP.III.D.4-153 and 155.

(the daylighting was performed under traffic), combined with soft soil in the area.[87] The LRR does not have to face the constraints of working around an existing tunnel with existing rail traffic, and it would conduct thorough soil investigations to determine the best way to design and engineer the cut (perhaps using a different method of sideslope protection or a different configuration of shotcrete and bolts).

Second, BNSF's only workpaper supporting the repair work for the cut at the location of former Tunnel No. 2 is a 2002 AFE which indicates that all of the work was initiated as a result of a concrete wall cracking and falling down at several locations in 2002, and that 100% of the repair cost was capitalized. See BNSF Reply Workpapers Vol. I, pp. BNSF.RP.WP.III.D.4-157 to 164. BNSF provided no AFEs or other evidence indicating that it incurred any repair costs at this location prior to 2002, or subsequent to 2003. Thus, there is no justification for assuming that the LRR will incur ${ } in annual expense for "special maintenance" of the cut walls at the former Tunnel No. 2 location.

WFA/Basin note that they used the same construction (grading) costs for the cut that BNSF incurred in daylighting Tunnel No. 2. Those costs included removal of the old tunnel and provision for working around existing high-volume rail traffic. The LRR would use a different construction approach and undoubtedly could build a cut from

[87] Having hard layers on top of soft layers is very typical of rock/soil formations in this area, and it is important to conduct sufficient core drilling to detect potential moisture problems and devise adequate methods for dealing with them.

scratch (before traffic begins to move) at a lower cost than BNSF's cost for the tunnel daylighting project. However, to be conservative, and because additional sideslope protection appears to be necessary, WFA/Basin's engineering and MOW experts have decided to increase the cost of constructing and protecting the cut by { } million, which is the total amount BNSF spent for repairs at this location in 2002 and 2003 according to the relevant AFE, indexed to 4Q04. See Part III-F-2-b-iii-(c) below. Adding this one-time amount to road property investment costs is appropriate since BNSF capitalized the amounts it spent for repairs to the daylighted tunnel in 2002 and 2003.

Wendover Canyon. Mr. Albin asserts that the track running through Wendover Canyon between Stokes and Cassa requires special maintenance attention to clean up "isolated slip-outs and rock falls," and estimates annual clean-up costs for this segment of \${ }. See BNSF Reply Narr. at III.D-193. The only basis for this cost is a summary workpaper (BNSF Reply Workpapers Vol. I, p. BNSF.RP.WP.III.D.4-151) that provides no supporting details with respect either to the actual clean-up work required or its cost.

WFA/Basin's MOW experts have, in fact, provided for the removal of rock and soil debris from the track in Wendover Canyon. This work is performed by the LRR's two-person Ditching Crew which is equipped with a Gradall. This crew (which Mr. Albin has needlessly eliminated) keeps the track in Wendover Canyon clear of rocks and the ditches clean. There is no need to double-up on the cost of the Ditching Crew by providing an extra ${ } of annual expense for cleanup work in Wendover Canyon.

f. Other

i. Random Track Outages

The discussion of random track/signal or "trouble ticket" incidents at pp. III.D-138 to 141 of BNSF's Reply Narrative is puzzling given the other BNSF evidence on this subject in connection with the RTC Model. Mr. Albin asserts that there were 1,400 trouble ticket occurrences in 2004 on the lines replicated by the LRR, with 1,224 occurring on the Orin Subdivision alone. However, Mr. Albin acknowledges that the Orin Subdivision occurrences reflect the track wear and tear caused by UP traffic in addition to BNSF traffic (for several years UP has transported more than half of the total tonnage that traverses the Orin Subdivision). He none the less asserts that the LRR would be faced with hundreds of trouble-ticket problems annually that need to be addressed as "emergency" maintenance items. Id. at 139-140.

WFA/Basin have discussed "trouble ticket" incidents extensively in connection with their RTC Model simulation of the LRR's peak-period operations. See WFA/Basin Op. Narr. at III-C-52 to 56, and WFA/Basin Rebuttal Narr. at III-C-37 to 43 above. As discussed there, many trouble tickets do not involve emergencies that require immediate attention, but can be scheduled for correction at the dispatcher's discretion. This means that many of these items can be corrected by the LRR's field track and signals/communications forces during regular working hours. Contrary to Mr. Albin's insinuation, WFA/Basin have not neglected to provide adequate field personnel to handle trouble ticket items.[88]

BNSF's Operating witness, Mr. Mueller, provided for the inclusion of a total of only 19 trouble ticket incidents for the LRR's lines during the peak 13-day RTC Model simulation period. Even if all 19 of Mr. Mueller's trouble-ticket items are included,[89] they equate to an average of only 1.46 events per day on 218 route-miles during the peak traffic period of the railroad's entire 20-year DCF existence. The LRR certainly has adequate field forces to handle trouble ticket events requiring immediate action that occur with this kind of frequency, regardless of the time of day involved.

ii. <u>Reduction from Peak Year to Base Year MOW Costs</u>

BNSF notes that WFA/Basin's MOW staffing reflects the LRR's peak (2024) traffic level, and asserts that WFA/Basin improperly reduced the LRR's total maintenance costs for that year by the ratio of 2004 (base year) GTMs to 2024 GTMs. <u>See</u> BNSF Reply Narr. at III.D-147 to 148. BNSF states that indexing peak-year MOW

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[88] In this regard WFA/Basin note that the three-person System Track Crew they have added on Rebuttal would work four days a week, including the weekends, to strengthen seven-day coverage of field track maintenance. The Signal/Communications Maintainers and the two Signal/Communications Technicians added on Rebuttal can also respond to trouble-ticket items involving the signal and communications system.

[89] WFA/Basin's Operating witnesses, Messrs. Reistrup and Smith, have demonstrated that seven of Mr. Mueller's trouble ticket items should be excluded, which means that the LRR in fact is likely to encounter a total of 12 such items, or less than one per day on average, during its peak traffic period. <u>See</u> pp. III-C-37 to 43 above.

operating expense to base-year operating expense in this manner is inconsistent with past Board precedent (which BNSF does not cite) and leads to allegedly nonsensical results. Id. BNSF proposes, instead, to use an approach that involves developing an estimate of the normalized or average annual maintenance of the LRR over the 20-year DCF period, which it claims is consistent with the procedure used in prior SAC proceedings.

BNSF's assertion is incorrect. In all SAC rate cases, the major categories of SARR operating expense have been calculated based on operating statistics developed at the peak-year level and then reduced to the base-year level to reflect different traffic levels. As BNSF acknowledges elsewhere in its Reply evidence (see pp. III.C-9), the deflator methodology uses the ratio between the SARR's peak-year net tons and its base-year net tons. The base year dollars associated with crew wages, locomotive leases, and other categories of operating expense that vary with traffic volume are then adjusted each year based on changes in traffic and inflation.

This approach has been accepted by all parties (and the Board) as a reasonable surrogate for having to develop and cost an operating plan for each of the 20 years in the DCF model. There is no reason to treat MOW operating expense any differently than other major expense categories that vary with volume.

iii. LRR Capital Maintenance of Way

(a) Capitalized MOW

At page III.D-194 of its Reply, BNSF claims that the inadequacy of WFA/Basin's maintenance of way expense is demonstrated by WFA/Basin's calculation of the annual capital cost for replacement of assets, which when corrected for spreadsheet linking errors is only $13.5 million. By comparison, BNSF calculates the annual capital cost for replacement of assets to equal $32 million.

BNSF makes this claim even though it correctly acknowledges that the calculation of the annual capital cost of replacement of assets is not used in determining stand-alone costs, as the replacement of capital assets is accounted for through the depreciation in the DCF model. See BNSF Reply Narrative at III.D-194 n. 261. As a result, BNSF's entire argument regarding WFA/Basin's calculation of the annual cost of replacement of assets is merely rhetoric with no consequence to the outcome of this proceeding.

BNSF further asserts that WFA/Basin's alleged understatement of the annual cost of replacement of capital assets is a result of their underestimation of the frequency with which the capital assets will need to be replaced and the use of contractors to perform all normalized (program) maintenance work without allocating sufficient resources to perform the work. Id. at III.D-194. BNSF's allegation that the frequency of the replacement of the capital assets is understated is incorrect. WFA/Basin rely on

BNSF's actual rates of depreciation (i.e. asset lives) as reported to the STB in its R-1 Annual Report to determine the frequency of replacement of each of the capital assets. Stated differently, WFA/Basin are merely relying on BNSF's own experience to determine the required frequency of asset replacement.

BNSF's allegation that WFA/Basin's use of contractors understates the annual cost of replacement of assets is also incorrect. The use of contractors to perform program maintenance has been shown to be an accepted practice in the railroad industry. For example, as reported in the September 2003 issue of Progressive Railroading, Rail America uses contractors to perform 95 percent of all capital project work, including projects such as installing ties, re-laying rail and surfacing track for its 50 railroads.

(b) Asset Lives

BNSF asserts that WFA/Basin overestimated the useful lives of the LRR's crossings, ties and rail. See BNSF Reply Narr. at III.D-195 to 196. With respect to crossings, WFA/Basin provided for asphalt road crossings on Opening. BNSF asserts that because of the need to replace asphalt crossings each time the crossings are resurfaced, the useful life of the LRR's crossings is only three years instead of the 53 years that WFA/Basin assumed. Id. at III.D-195.[90]

[90] In footnote 262 on p. III.D-195, BNSF states that WFA/Basin included costs for only 109 of 198 crossings and that the actual number of crossings should be 209. WFA/Basin agrees that their Opening crossing count, and in particular the number of (continued...)

First, it is unclear how BNSF calculated its alleged 53-year useful life for the LRR's crossings. On Opening WFA/Basin essentially assumed a ten-year useful life by providing for resurfacing of 10 percent of the LRR's crossings annually. See WFA/Basin Op. Narr. at III-D-107. In any event, as described in Part III-F-8-c below, WFA/Basin concur with BNSF that concrete panel crossings are preferable to asphalt crossings, and thus have accepted BNSF's proposal to use concrete panel crossings for the LRR. This moots BNSF's argument concerning the useful life of asphalt crossings.

With respect to ties, BNSF asserts that WFA/Basin's assumption of a 21-year useful life for wood ties is unrealistic for a high-tonnage coal line such as the LRR. Id. at III.D-195 to 196. However, according to BNSF's track charts produced in discovery, a portion of the Orin Subdivision has wood ties that have not been replaced in 20 years.[91] Portions of the Canyon Subdivision main line have wood ties that have not been replaced since 1979 – or more than 25 years ago. These locations include Main 2 between East Cassa and West Cassa (MP 107.8 to MP 11.7) and near West Elkhorn (MP 121.3 to MP122.8).[92] Apparently these ties are still giving good service. WFA/Basin

[90](...continued)
tracks to be crossed, was in error. See Part III-F-8-b below. WFA/Basin have corrected their maintenance spreadsheet accordingly.

[91] See Orin Subdivision track chart reproduced in WFA/Basin Op. Workpapers Vol. 6, p. 03960 (wood ties on Main 1 between MP 1 and MP 20; ties between MP 18 and MP 20 date from 1985).

[92] See WFA/Basin Op. Workpapers Vol. 6, pp. 04025-028.

Witness Kenyon also notes that the DRGW had good results with wood ties, including severe locations such as the line between Denver and Pueblo which carried 65 MGT per year on 1.4% grades with 6 and 7 degree curves. The 21-year average life is amply supported by experience on heavy-haul lines.

With respect to rail, BNSF asserts that WFA/Basin's rail-life assumptions are unrealistic in light of their proposed rail grinding schedule. Id. at III.D-196. However, as noted above, WFA/Basin have increased the rail grinding frequencies in response to BNSF's discussion of this issue, so this criticism is mooted.

(c) Reliance on Outside Contractors

BNSF argues that in previous SAC proceedings "the Board has already recognized that heavy reliance on outside contractors to perform MOW work is improper" (citing Xcel I at 79). Id. at III.D-196 n.174. However, in Xcel I the Board merely criticized the complainant's reliance on outside contractors and cross-training to justify a skeletal in-house work force for day-to-day (OE) maintenance. Id. In this case, WFA/Basin's MOW experts have minimized the use of cross-training and they certainly have not provided a skeletal MOW work force. Their provision for the use of outside contractors for program maintenance is consistent with their own extensive real-world experience and with that of other railroads, as described below.

BNSF also attempts to discredit the use of outside contractors for program maintenance by noting that the MOW outsourcing article cited at page III-D-74 of the

WFA/Basin's Opening Narrative and included in the Opening workpapers[93] concerns only the use of engineering and design firms, not the use of contractors to perform MOW work itself. See BNSF Reply Narr. at III.D-196. BNSF concludes from this that WFA/Basin's proposed use of contractors for program maintenance is not supported. However, BNSF ignores the experience of WFA/Basin's MOW experts who have been responsible for the maintenance of heavy haul coal railroads such as WRPI where outside contractors were used to perform program maintenance projects. A major short-line holding company, Rail America, currently uses outside contractors to perform 95 percent of program maintenance projects for its 50 railroads. See WFA/Basin Rebuttal Workpapers, pp. 0487-492.

Most Class I railroads (including BNSF) continue to use in-house forces for annual programs because of their labor agreements, which require the use of their own employees for such work. As these agreements are renegotiated, even the Class I's are turning more and more to outside contractors for program maintenance. As WFA/Basin Witness Blackwell pointed out on Opening, UP has been reducing its in-house maintenance forces and increasing the use of contractors in recent years. See WFA/Basin Op. Narr. at III-D-82.

BNSF notes that it "has found it more efficient" to handle program track, bridge and other maintenance internally (e.g. using seasonal track gangs) rather than

[93] See WFA/Basin Opening Workpapers Vol. 8, pp. 5208-5211.

using contractors. BNSF Reply Narr. at III.D-179. However, BNSF is a much different organization than the LRR. The LRR is a much smaller firm than BNSF, and concentrates its efforts on transporting a single commodity in a small geographic region. Thus, it is much better positioned to identify and monitor the contractors it uses for various out-sourced activities than BNSF. By contrast, BNSF spans more than half the continent and carries a wide variety of commodities over its far-flung network. It cannot be as nimble as the LRR; its transaction costs of dealing with outside vendors at so many locations undoubtedly would be higher than the LRR's. Thus, BNSF might indeed find it more efficient to bring some of these functions in-house (particularly in view of its labor agreements). This is a standard economic result, and to force the LRR to replicate BNSF's "make-or-buy" decisions would be an entry barrier.[94]

Finally, BNSF claims that the cost of contractors' work as presented by WFA/Basin is "arbitrary and unsupported." BNSF Reply Narr. at III.D-196. A total of 19 items are listed as contract work in the spot maintenance spreadsheet (WFA/Basin Op. electronic workpaper "Spot Maint.xls," tab "Contract Work"). Only five of these items are hard coded; the other 14 items are unit prices developed in the "Unit Costs" tab of this

[94] See "The Nature of the Firm" by Ronald Coase (1937), reprinted in R.H. Coase, The Firm, the Market, and the Law, University of Chicago Press, 1988. According to Coase in this well-known article, while most items can be purchased "on the market," within firms the price mechanism is suppressed. This is so because there is a cost to relying on the marketplace and an entrepreneur may be better at allocating labor and capital resources over some relevant range. Thus, the exact boundaries of a firm's "make or buy" decision depends on many factors (such as size and geographic scope, which are highly relevant here as described above in the text).

spreadsheet. References to workpapers and actual calculations are supplied for all of the unit prices in the "Unit Costs" tab. Of the five hard-coded items, BNSF agrees with WFA/Basin's costs for one, Miscellaneous Engineering. See BNSF Reply Narr. at III.D-186. The remaining four items (Storm debris Removal, Derailments, Washouts and Environmental Mitigation) have been discussed above and thus are accounted for.

(d) Work Trains

BNSF Witness Albin asserts that the LRR would require 236 work-train days per year, of which 177 days would be used for program replacement work and 59 days would be used for "miscellaneous maintenance work." BNSF Reply Narr. at III.D-197 to 198. The spreadsheet in which Mr. Albin developed the annual program replacement days (BNSF Reply electronic workpaper "III D 4 Maintenance of Way.xls," worksheet "Work Train") does not explain how he developed the units to be replaced annually or the source for the daily production rates he used.[95] However, WFA/Basin's MOW experts accept 174 days per year (the number shown in Mr. Albin's spreadsheet) as a conservatively high but reasonable number of days for replacement programs – although not in the first three years, when there would be no such programs because the LRR starts out with brand new track and bridges. Mr. Albin provided no support for his assumption

[95] In addition, the numbers in the spreadsheet do not match the narrative text. The spreadsheet shows a total of 232 work train days annually, with 174 days for annual replacement work and 58 days for other ("miscellaneous") work. WFA/Basin's experts note that 232 work-train days per year equates to more than one work-train day per route mile. It is unlikely that work trains would be this unproductive.

of 58 days annually for "miscellaneous work trains," which presumably refers to OE maintenance performed by the LRR's field track forces. Based on the LRR's small size (218 route miles), the nature of the work to be performed by its field maintenance forces, and their extensive experience in maintaining western heavy-haul track, WFA/Basin's MOW experts have concluded that a maximum of 50 work-train days annually would be required to support miscellaneous maintenance.

In addition to Mr. Albin's failure to support the daily production rates for work trains, he failed to provide any support for his proposed daily cost of $6,000 for work train track maintenance expenditures other than the self-serving e-mail discussed above. However, WFA/Basin's MOW experts accept BNSF's $6,000 per day unit cost for work trains as reasonable, and apply it to the 50 work-train days required for miscellaneous work-train operating expense.[96]

5. Leased Facilities

The LRR has no leased facilities, and does not share any joint facilities with another railroad. All of the LRR's facilities are constructed and owned outright.

6. Loss and Damage

On Opening, WFA/Basin calculated loss and damage costs for the LRR in the base year of $0.3 million. This cost was based on actual BNSF 2003 loss and damage

[96] This amount is included in WFA/Basin's operating-expense calculations in Rebuttal electronic workpaper "LRR Operating Expenses Reb.xls." It should be noted that on Reply BNSF overstated its operating expenses by including work-train expenses for work days related to replacement programs.

per ton for coal multiplied by the 202.3 million tons of coal moving on the LRR in the base year. See WFA/Basin Op. Narr. at III-D-129 and workpapers cited therein. This methodology for determining a SARR's annual loss and damage costs has been used by both parties and accepted by the Board in prior rate cases, including Xcel and TMPA.

In this case, BNSF asserts that loss and damage amounts can vary significantly between years and that average loss and damage costs for the three most recent available calendar years should be used. BNSF Reply Narr. at III.D-199. BNSF's position lacks support in the Board's precedents and should be rejected.

7. Insurance

WFA/Basin calculated the LRR's insurance expense using BNSF's 2003 insurance ratio of 3.59 percent of operating expenses (less depreciation, casualties and insurance). Base-year insurance costs of $3.8 million were calculated using this procedure. See WFA/Basin Op. at III-D-130. The procedure used by WFA/Basin was identical to the procedure accepted by the Board in Xcel I at 83.

On Reply, BNSF argues that applying BNSF's ratio of insurance to freight operating expense understates the insurance costs the LRR would incur because of BNSF's size, and that the LRR's insurance expense should instead be calculated using the average ratio of insurance to freight operating expense for Class I carriers with less than $1 billion in revenue for 2003 and 2004. This yields an average ratio of 4.28 percent and base-year LRR insurance costs of $6.9 million when applied to BNSF's excessive annual operating expenses for the LRR. See BNSF Reply Narr. at III.D-199 to 200.

According to BNSF, "[l]imited resources and investor demands require smaller carriers to self insure at much lower levels, approximately $5 million" and that as a result, "smaller carriers pay more in insurance and casualty costs as a percentage of their expenses than larger carriers do." Id. At 200. However, BNSF's argument is inconsistent with available facts.

For example, under BNSF's strictly revenue-based theory, tiny Providence & Worcester (P&W) with only $22 million in revenues in 2001 should bear a proportionately larger burden than Kansas City Southern (KCS) with more than $560 million in [2001] freight revenues. In fact, this is not the case. KCS's 2001 insurance was 7.0 percent of operating expenses whereas P&W's was 3.8 percent, nearly the same as BNSF's. See WFA/Basin Rebuttal electronic workpaper "Other RR Insurance.xls."

Moreover, BNSF's trend is highly inconsistent. BNSF's own data shows that the Soo Line, which has annual revenue of less than $1.0 billion, has the lowest average insurance ratio (2.66 percent) of all carriers in BNSF's comparison group. Meanwhile, UP, which is the largest carrier in BNSF's comparison group, had an average insurance ratio for 2003 and 2004 of 5.37 percent, or more than twice that of the Soo Line.[97]

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[97] See BNSF Reply electronic workpaper "Insurance.xls."

In at least one prior SAC rate case, BNSF itself argued that the Board should accept insurance evidence based upon the ratio of insurance expense to total expenses (less depreciation) from its own R-1. The Board accepted this argument, and rejected the complainant's estimate based on insurance quotes for short-line railroads. See WTU, 1 S.T.B. at 695, where the Board held:

> We cannot accept an insurance estimate based on short-line railroad experience. There is no evidence to suggest that these short-line railroads perform similar operations to those that would be performed by the WTRR.... We accept BN's ratio because it is based on the operations of a major railroad, and we apply it to our restated operating expenses.

Similarly, BNSF has presented no evidence to suggest that the smaller Class I railroads "perform similar operations to those that would be performed by the [LRR]" (id.), and in fact there are huge differences between a Class I carrier's operations (and traffic mix) and those of the LRR.

BNSF's strictly revenue-based insurance assumption also ignores the actual risk factors against which insurance is intended to protect a railroad and on which insurance rates are based. The greatest risk against which a railroad seeks to be insured is a catastrophic accident involving a derailment or collision (particularly collisions involving at-grade crossings) or an accident involving hazardous materials. BNSF faces a far greater risk of such incidents than the LRR faces because of the simple, repetitive nature of the LRR's operations. In addition, unlike BNSF, the LRR carries only coal, which is not classified as a hazardous commodity.

Finally, the LRR operates largely in an isolated area of the country (sparsely-populated northeastern Wyoming) where the risk of collisions at grade crossings (for example) is significantly reduced compared to the totality of BNSF's operations which include many large urban areas. The LRR handles intact trains, does not conduct local switching, and does not conduct significant yard operations.

The Board should reject BNSF's insurance analysis because it is inconsistent with governing precedents and because BNSF has not shown that there is a reason to use Class I carriers with less than $1 billion in revenues instead of BNSF itself for purposes of benchmarking the LRR's insurance costs.

8. Ad Valorem Tax

The LRR operates exclusively in the state of Wyoming. WFA/Basin estimated Wyoming ad valorem taxes for the LRR of $1.41 million in 4Q04, and adjusted the total tax liability downward by $0.25 million on the assumption that the LRR leases its locomotives and railcars and, therefore, would not have to pay taxes on this equipment. See WFA/Basin Op. Narr. at III-D-130 to 131.

BNSF disputes WFA/Basin's equipment adjustment because "[u]nder Wyoming law, tax is assessed on all property owned or used by a railroad in its business [and] both owned and leased equipment are included in the value of the railroad." BNSF Reply at III.D-201. The ultimate liability for taxes on leased equipment is a matter of negotiation between the lessor and the lessee, so it is not necessarily the case that the LRR would bear the Wyoming tax cost for its equipment. However, to eliminate an area of dispute WFA/Basin have excluded the tax adjustment they made on Opening in their Rebuttal calculation of ad valorem taxes.

9. Other – Calculation of Annual Operating Expenses

WFA/Basin described the procedures use to calculate the LRR's annual operating statistics, as well as the procedures used to develop the LRR's annual operating expenses for the peak year and the base year, in Parts III-C-1-c-ii and III-D-9 of its Opening Narrative. BNSF has accepted these basic procedures (except for MOW operating expense), as described in Part III-C of its Reply Narrative. The indexing of MOW operating expenses is discussed in Part III-D-4-f-ii above.